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USSR Report

CONSTRUCTION AND EQUIPMENT

No. 4



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CONSTRUCTION

NEW LAWS GOVERN HOUSING, TERRITORIAL CONSTRUCTION

Rural Housing and Work Force Stabilization

Moscow BYULLETEN' NORMATIVNYKH AKTOV MINISTERSTV I VEDOMSTV SSSR in Russian
No 9, 1980 pp 3-9

[Instruction No 45/25/178/151-K-3 of the USSR Ministry of Agriculture, the USSR Ministry of Finance, USSR Gosbank and the USSR Ministry of Justice issued 23 February 1979: "Instruction on Procedure for Implementing Decree No 518 of the CPSU Central Committee and USSR Council of Ministers dated 19 June 1978 and Entitled 'On Further Development of Private Dwelling Construction and Work Force Stabilization in Rural Areas'"]

[Text] On behalf of further development of the construction of well-equipped private dwellings and stabilization of the work force in rural areas the CPSU Central Committee and USSR Council of Ministers have in Decree No 518, dated 19 June 1978 and entitled "On Further Development of Private Dwelling Construction and Work Force Stabilization in Rural Areas":

i. required of the central committees of the communist parties and councils of ministers of union republics, the USSR Ministry of Agriculture, the USSR Ministry of Land Improvement and Water Resources, the USSR Ministry of Food Industry, the USSR Ministry of Meat and Dairy Industry, and local party, soviet and agricultural authorities that they see to expansion of construction in rural areas of well-equipped private dwellings of the farmhouse type with outbuildings for livestock and poultry, accomplished through the efforts of state and interkolkhoz construction organizations operating as contractors from standard designs and using wood-panel and other progressive preassembled fabrications manufactured offsite;

ii. granted permission to sovkhoses and other state agricultural enterprises to build private dwellings for farmworkers in the settlements of those farms on the following terms and conditions:

a) the cost of construction is to be reckoned according to the procedure, at the prices and by the norms adopted for determining the estimated cost of state housing construction. Councils of ministers of union republics

are to set the maximum construction cost of these dwellings in agreement with USSR Gosplan, USSR Gosstroy, the USSR Ministry of Agriculture and the USSR Ministry of Finance as a function of local building conditions;

b) construction of utility mains and installations inside and outside the settlements is to be financed from state capital investments;

c) the down payment by workers of their own funds shall be made in the amount of 20 percent of the estimated cost of construction of the dwelling and outbuildings;

iii. extended the right to directors of sovkhozes and other state agricultural enterprises, in agreement with trade union organizations, to reduce to 10 percent the proportion of the down payment indicated for discharged servicemen, newlyweds and young specialists, and also--on farms experiencing an acute shortage of manpower--for workers in ordinary occupations taking up permanent employment on those farms;

iv. ordered USSR Gosbank to extend credit to kolkhozes, sovkhozes and other agricultural enterprises to build private dwellings with outbuildings pursuant to the decree of the CPSU Central Committee and USSR Council of Ministers indicated in the amount of their estimated cost, interest to be paid on the credit by those farms in the amount of 0.5 percent per annum.

The credit shall be repaid over a 20-year period after completion of the dwelling's construction. Half of the total amount of the credit shall be repaid by sovkhozes and other state agricultural enterprises out of the economic incentive funds of those farms. Councils of ministers of union republics are allowed in exceptional cases to repay that portion of the credit on sovkhozes and other state agricultural enterprises operating at a loss or at a low rate of profit from the state budget in accordance with dates of payment as they occur. The USSR Ministry of Finance is ordered to make provision for the funds needed for this purpose in drafts of the state budget.

The workers of the farm shall repay the remainder of the credit in equal monthly payments;

v. recommended to kolkhozes that they earmark funds of their own for construction of utility mains and installations inside and outside settlements and also build private dwellings with outbuildings and repay the credit issued for this purpose by USSR Gosbank according to the procedure envisaged by this decree of the CPSU Central Committee and USSR Council of Ministers. Kolkhozes operating at a loss or with a low rate of profit are allowed to appropriate funds from the state budget to repay this credit under the conditions adopted for sovkhozes and other state agricultural enterprises;

vi. assigned to kolkhozes, sovkhozes and other agricultural enterprises the functions of the customer with respect to project planning and construction of private dwellings for farmworkers pursuant to this decree of

the CPSU Central Committee and USSR Council of Ministers. These dwellings shall be built from designs recommended by the gosstroy of the union republics for the given region on sites envisaged by the scheme of the settlement's layout and development;

vii. ordered the councils of ministers of republics and executive committees of kray and oblast Soviets of People's Deputies:

a) in case of necessity to allow construction of private dwellings for farmworkers from local building materials under the conditions envisaged in Points 2-5 of this decree of the CPSU Central Committee and USSR Council of Ministers;

b) furnish the requisite architectural and building inspection during construction of these private dwellings;

viii. established that the personnel of kolkhozes, sovkhoses and other agricultural enterprises who leave the kolkhoz or leave their employment in the sovkhos or other agricultural enterprise without good cause before the end of the 20-year period from the date of assuming occupancy are required:

a) either to turn over to the farm the dwellings and outbuildings built with credit of USSR Gosbank. In this case the kolkhoz, sovkhos or other agricultural enterprise reimburses the former workers their down payment for construction of the dwelling and the amount they have paid to reduce the outstanding credit, withholding the cost of the wear on structures at least in the amount of regular depreciation;

b) or to reimburse the kolkhoz, sovkhos or other agricultural enterprise expenditures made from the state budget and the resources of the farm to build the dwellings and outbuildings.

Pursuant to Point 10 of Decree No 518 of the CPSU Central Committee and USSR Council of Ministers, dated 19 June 1978, the USSR Ministry of Agriculture, the USSR Ministry of Finance, USSR Gosbank and the USSR Ministry of Justice set forth the following procedure for implementation of that decree:

1. Sovkhoses and other state agricultural enterprises regardless of their departmental subordination, kolkhozes, and interfarm enterprises (organizations)* shall build private dwellings for workers actually working on those farms.

2. Workers on the farms wishing to obtain private dwellings with outbuildings on the terms indicated above shall submit applications to the directors of the farms (boards of kolkhozes) indicating the type of house, the number of rooms in the dwelling, and a list of the outbuildings, and they

* Hereafter referred to as the "farms."

shall also make commitments to furnish the down payment in their own funds upon completion of the dwelling's construction and to repay over a 20-year period the established portion of the credit of the bank for construction of the dwelling and outbuildings. Directors of farms (kolkhoz boards) shall jointly with trade union organizations examine these applications, adopt lists of workers for which private dwellings will be built in the planning year, and at the same time fix the proportion of the down payment of each worker's own funds.

These lists shall be adopted before 1 March of the year preceding the planning year.

3. Directors of farms (kolkhoz boards) shall issue orders in the prescribed manner for project planning and surveying and construction and installation work on contract for project planning and construction of private dwellings with outbuildings. After due clearance and approval of plans for these projects, itemized lists of project planning and surveying work and site-by-site itemized lists shall be drawn up for construction of dwellings in the planning year, subject to approval by farm directors (kolkhoz boards).

4. Project plans and cost estimates for construction of private dwellings shall be prepared by state and interkolkhoz project planning organizations. This documentation shall be approved by farm directors (kolkhoz boards) in agreement with the workers of the farms for whom the dwellings are being built.

5. The farms shall pay for project planning and surveying and the cost of building the dwelling from credit of USSR Gosbank.

6. As a rule the farms shall build the private dwellings on a contract basis. As a function of specific conditions these dwellings may be built by decision of farm directors (kolkhoz boards) by the direct labor method as well. The construction time of the dwellings must be fixed in accordance with the standards in effect, but not to exceed 1 year.

7. The customer's engineering supervision over construction of private dwellings when construction is done on a contract basis shall conform to the procedure established for state housing construction.

8. Private dwellings and outbuildings whose construction has been completed shall be accepted for use in accordance with the procedure established by current legislation by state acceptance commissions in the presence of the farmworker for whom the dwelling was built.

9. USSR Gosbank shall extend credit to the farms in accordance with plans for long-term credit financing of construction of private dwellings and outbuildings for livestock and poultry for farmworkers.

The credit for this purpose shall be extended to the farms in the amount of the estimated construction cost of the private dwellings and outbuildings, but not to exceed the maximum construction cost of such dwellings as fixed by councils of ministers of union republics in agreement with USSR Gosplan, USSR Gosstroy, the USSR Ministry of Agriculture and the USSR Ministry of Finance as a function of local building conditions.

10. Long-term credit for construction of dwellings for farmworkers shall be extended to the farms regardless of the status of accounts with respect to outstanding loans.

11. Interest at the rate of 0.5 percent per annum shall be collected from the farms for use of the credit, and 3 percent per annum shall be collected on delinquent amounts for the period of delinquency.

12. The workers of the farms shall pay a down payment of their own funds in the established proportion in cash according to the procedure envisaged by Point 24 of the present Instruction after completion of construction of dwellings and outbuildings and at the time when these dwellings are turned over to them.

The workers acquire the right of property in the private dwellings and outbuildings from the moment these dwellings are turned over to them.

The dwellings shall be transferred on the basis of contracts the farms conclude with the workers. The form of the contract shall be set forth by the USSR Ministry of Justice in agreement with the USSR Ministry of Agriculture.

13. In order to obtain the credit the farms shall submit the following to institutions of USSR Gosbank:

- a) the itemized list of the site (Annex No 1 to the Rules on Financing of Construction), duly approved by the farm director (kolkhoz board) and assented to by the contractor;
- b) the list of farmworkers for whom credit is requested for construction of private dwellings;
- c) the certificate whereby the farm director (kolkhoz board) approved the project plans and estimates (Annex No 6 to the Rules on Financing of Construction) and the cost estimate for construction of dwellings and outbuildings (to be checked);
- d) the farm's contract with the building contractor (if the dwellings are to be built by the direct labor method, farms shall submit to USSR Gosbank institutions the calendar plan for construction of the dwellings and also a certificate on the availability of building materials adequate for this construction);

e) the farm's application and signed commitment for obtaining credit from USSR Gosbank.

The farms shall also submit to the bank the applications of the workers to obtain private dwellings and their commitments to make the down payment upon completion of construction of those dwellings and to repay their portion of the credit according to the procedure envisaged in Point 24 of this Instruction. These documents shall be returned to the farm after a check that they have been made out properly.

14. Upon receipt of these documents USSR Gosbank institutions shall verify the following:

a) correspondence of the annual amount of work adopted under the contract with the building contractor with the volume of work on the approved itemized list of the project;

b) whether the resources of economic incentive funds required to repay indebtedness under the loan have been provided for in the production and financial plans of the farms. If this check shows that funds to repay the loan have not been provided for in the production and financial plans, the institution of USSR Gosbank shall present a demand to the farm that it make the necessary changes in that plan.

15. When dwellings and outbuildings are being built on a contract basis, the credit shall be extended to the farms to cover accounts for dwellings whose construction has been completed and which have been accepted for use on the basis of the documents of the state acceptance commission drawn up according to the procedure established for state housing construction, and also to credit advances to construction organizations at the intervals and in the amounts established in construction contracts, and to cover outlays for partial performance of construction and installation work involved in construction of dwellings.

16. In cases when private dwellings and outbuildings are built by the direct labor method, funds shall be paid against the credits which have been opened as construction proceeds on the dwellings on the basis of documents for completed work items in accordance with the Rules for Financing Construction.

17. In cases when construction of private dwellings has not been completed by the date specified, institutions of USSR Gosbank extending the credit may if the farms intercede grant an extension not to exceed 6 months for completion of construction of the dwelling.

18. When state architectural and building inspectors find defects in construction of private dwellings and outbuildings, on the basis of the reports of these agencies the institutions of the bank shall refuse payment of the bill for construction of such dwellings. If the bills have already

been paid, the director of the institution of USSR Gosbank shall issue an order to transfer from the giro accounts of the building contractors the total amount of work items done poorly to the loan account of the farm which is the customer. Payment of the bills shall be reinstated only after reports have been received from the agencies indicated above that the defects found have been corrected.

The same procedure shall be followed in withholding the value of work items performed poorly when construction is done by the direct labor method.

19. The credits shall be repaid by the farms and the workers (corresponding portion of the credits) according to the schedule set forth in the commitment.

20. Once a year, no later than 15 December, credits issued on the dwellings whose construction has been completed and which have been accepted for use shall be processed in the form of debt repayment schedules. The farms shall spread the payments on the credits over years and quarters in equal amounts. Credits obtained shall be repaid as payments date occur from the giro and current (special current) accounts of the farms.

On the due date the unpaid amount of the payment according to the farm's obligations shall be transferred from these accounts of the farm by order of the bank institution. Indebtedness still unpaid shall be transferred to balance-sheet account No 780 "Delinquent Indebtedness on Long-Term Loans" and shall be paid from the Giro and current (special current) accounts of the farms.

21. The total amount of credit to be repaid from resources of the state budget for farms operating at a loss or at a low rate of profit shall be annually established by councils of ministers of union republics.

The funds required for this purpose shall be provided for by the USSR Ministry of Finance in the draft of the USSR State Budget for the relevant year on the basis of requests of councils of ministers of the union republics, supported by specific calculations.

22. As payment dates occur, indebtedness under credits for farms operating at a loss and at a low rate of profit, on the basis of a decision of the director of the USSR Gosbank institution and within the amounts fixed by the councils of the ministers of the union republics, shall be written off and posted to balance-sheet account No 152 "Miscellaneous Accounts With Finance Ministries of Union Republics," from which these amounts are transferred on the first of each month through MFO [interbranch turnover] through the competent offices of USSR Gosbank to republic offices (in the union republics) of USSR Gosbank.

As amounts coming in from institutions of USSR Gosbank build up in account No 154, republic offices of USSR Gosbank charge them to the expenditures of the republic budget.

23. On dwellings whose construction has been completed and which have been accepted for use the workers shall assign debt repayment schedules for repaying indebtedness to the funds on the basis of the credit. These payments shall be quarterly and shall fall on 1 April, 1 July, 1 October and 1 January for the preceding quarter.

The workers of the farms shall repay the credit on a monthly basis at the rate of at least one-third of the amount of the quarterly payment indicated in the debt reduction schedule beginning with the quarter following that in which the certificate of the state acceptance commission accepting the dwelling for use was signed.

24. Workers shall make payments against the credit in cash to the cashier of the farm or to a savings bank for transfer to the farm's account or by remittances through communications enterprises.

The workers may file an application with the management of the farm (kolkhoz board) where they work for the money to be withheld monthly from their wages (the money portion of remuneration of kolkhoz members) for the payments against the credit, and they may also issue orders to a savings bank to transfer amounts from the balances in their accounts to repay the credit.

25. Private dwellings built with credit from USSR Gosbank for farmworkers must be used for the purpose intended.

26. Cash paid to the cashier of the farm by workers to repay their debt on the basis of the credit shall be paid by the farms within 3 days to institutions of USSR Gosbank and entered directly against the credit, without passing through their accounts.

Funds which farms withhold from the earnings of workers and employees (which kolkhozes withhold from the remuneration of kolkhoz members) in accordance with their repayment schedules on the basis of vouchers or workers' requests shall be transferred in the form of payment orders from Giro and current (special current) accounts at the same time when funds are obtained for wages (remuneration).

27. After concluding the contract to transfer the dwelling to the worker, the farms shall apply to notary offices or executive committees of rural soviets performing a notary's functions for a prohibition to be imposed according to prescribed procedure on conveyance of the dwelling.

28. Should the worker leave the farm or refuse acceptance of a dwelling built for him, the farm may turn that dwelling over to another worker, to whom the obligation shall be transferred at that same time.

Should a worker leave a farm for good cause, his obligation remains fully in effect.

29. Resources of the state budget reimbursed to the farm by a worker who has left the farm for good cause before the end of the 20-year period from the date he took up occupancy shall be credited as a revenue of the republic budget of the union republic within 3 days to Section 12, Paragraph 25 "Miscellaneous Receipts."

30. Interest shall be computed quarterly for the use of credit extended to farms against the daily balance and shall be paid from giro accounts of state agricultural enterprises and current (special current) accounts of kolkhozes, and if funds are lacking in their accounts, they shall be posted to the account of delinquent loans.

31. In the statistical reporting of USSR Gosbank credits granted for construction of private dwellings and outbuildings for livestock and poultry shall be indicated on Form No 741 under symbol 50 "Miscellaneous Private Borrowers," on Form No 742--under the appropriate symbols (except 06 and 07), and also under the total of the report on symbols newly introduced: 11--"To Sovkhozes and Other State Agricultural Enterprises for Construction of Dwellings for Farmworkers," 12--"To Kolkhozes for Construction of Dwellings for Farmworkers," 13--"To Interfarm Enterprises and Organizations for Construction of Dwellings for Farmworkers."

32. Audits of institutions of USSR Gosbank related to the credit financing of construction of private dwellings and outbuildings for livestock and poultry for farmworkers shall be conducted in accordance with current instructions of USSR Gosbank.

Regional Project Planning Organization of USSR Gosstroy

Moscow BYULLETEN' NORMATIVNYKH AKTOV MINISTERSTV I VEDOMSTV SSSR in Russian No 9, 1980 pp 10-18

[Decree No 48 of USSR Gosstroy, dated 30 March 1979: "Regulation on the Regional Project Planning Organization of USSR Gosstroy"]

[Text] The USSR State Committee for Construction Affairs hereby decrees:

1. To adopt the appended Regulation on the Regional Project Planning Organization of USSR Gosstroy.
2. To adopt the appended List of Regional Project Planning Organizations of USSR Gosstroy.
3. To recognize that decisions of USSR Gosstroy have been vacated in accordance with the list hereto appended.

Regulation on the Regional Project Planning Organization of USSR Gosstroy

1. General Provisions

1. Regional project planning organizations of USSR Gosstroy, including those under the jurisdiction of USSR ministries and departments and gosstroys of union republics, were formed pursuant to Decree No 978 of the USSR Council of Ministers on 10 September 1963 and entitled "On Establishment of Order in Construction Project Planning of Industrial Enterprises and Agricultural Production Facilities."
2. Regional project planning organizations perform the functions envisaged by the present Regulation within the republics, krays and oblasts indicated in the List of Regional Project Planning Organizations of USSR Gosstroy.
3. Regional project planning organizations shall perform the duties assigned to them at the expense of the resources of the state budget in accordance with plans approved by USSR Gosstroy. Should regional project planning organizations be engaged by general project planners to perform for them certain jobs in advance of project planning or project planning work, this work shall be done by agreement among the parties.
4. Regional project planning organizations shall perform the functions envisaged by the present Regulation under the guidance of USSR Gosstroy as to methods and shall annually submit the required report on fulfillment of the duties assigned them as part of the annual report.
5. Regional project planning organizations shall be guided in their activity by legislation of the USSR and the union republics in whose jurisdiction they perform their functions, by the decisions of USSR Gosstroy and other normative acts, and also by the present Regulation, and they shall strictly abide by socialist legality and state discipline.

2. Principal Task and Functions of the Regional Project Planning Organization of USSR Gosstroy

6. The principal task of the regional project planning organization is to carry out the unified technical policy being conducted by USSR Gosstroy, which is aimed at speeding up technical progress and raising the economic efficiency of capital investments in construction insofar as concerns optimum location of industrial enterprises and installations, the joining together of enterprises being planned into groups of enterprises with common transportation facilities, utility installations and auxiliary and supporting production operations and services (industrial parks),* assurance of the high quality of architectural, layout and construction designs and economical consumption of the principal building materials.

* The group of such enterprises is hereafter referred to as the "industrial park."

7. In accordance with the principal purpose indicated, the following functions are assigned to the regional project planning organization:

i. the drafting, in accordance with plans approved by USSR Gosstroy, of the schemes of master plans of industrial parks, and also schemes for location of industrial enterprises being planned and schemes for regularization of existing development in industrial areas of cities or other settlements;*

ii. assurance of unity among construction designs and standardization of fabrications, buildings and structures in the drafting of schemes of master plans of industrial parks and schemes for regularization of existing development;

iii. participation according to prescribed procedure in the drafting of TEO's [feasibility study] for construction (reconstruction) of enterprises, buildings and structures and in selection of the construction site with respect to possible cooperation among auxiliary production operations and services, utility installations and transportation connections with the respective production operations and facilities of enterprises and housing development located nearby, and also with respect to the possibility of building industrial parks;

iv. the drafting of recommendations for the creation of industrial parks and their submittal to USSR Gosstroy and the gosstroy of the union republic in which the industrial park would be located;

v. the writing up of assignments for the drafting of schemes of master plans of industrial parks and schemes for regularization of existing development and their submittal to USSR Gosstroy or the gosstroy of the union republic in which the industrial park or industrial area is located;

vi. submittal of recommendations to the respective superior organization concerning the section "Drafting of Schemes of Master Plans of Industrial Parks" of the Plan of Work To Compile Regional Layout Schemes and Schemes for Layout and Development of Cities and Settlement;

vii. with permission of USSR Gosstroy or the gosstroy of the union republic the inclusion in approved schemes of master plans of industrial parks and schemes for regularization of existing development the necessary changes following clearance with the interested ministries, departments and executive committees of Soviets of People's Deputies;

viii. participation according to prescribed procedure in the work of commissions for selection of construction sites created by ministries and departments figuring as clients;

* The scheme for establishing order in existing development in the industrial areas of cities and other settlements is hereafter referred to as the "scheme for regularization of existing development."

ix. the granting of consent on assignment for the project planning of enterprises, buildings and structures regardless of departmental jurisdiction (except for facilities of the defense industries and special-purpose facilities) before they are approved, in the following respects:

a. conformity of the production capacity adopted for the enterprise (project) to be planned and the place where it is to be built to assignments envisaged by multiannual plans for economic and social development or individual decisions of the USSR government;

b. soundness and technical-and-economic feasibility of the new construction as compared to the possibility of expansion or reconstruction of existing similar enterprises (when there is no TEO);

c. the intended cooperation between facilities of auxiliary production operations and services, utility facilities and transportation connections with corresponding facilities of enterprises and housing development located nearby and also the possibility of combining the enterprises (projects) being planned to form industrial parks.

NOTE: Assignments for the project planning of enterprises, buildings and structures shall not be subject to clearance by the regional project planning organization when the regional project planning organization has been engaged to prepare the TEO and select the construction site.

x. participation in the drafting of schemes for development and location of the productive forces by economic regions and union republics, of regional layout schemes and drafts, and also drafts of master plans of cities and other settlements;

xi. participation in compiling the basic principles (technical specifications) for construction project planning of enterprises, buildings and structures, of catalogs and nomenclature of fabrications and products for construction in the areas of activity of the regional project planning organization;

xii. work to discover and study reserve areas for industrial construction and compilation of reference materials on the basis of the data obtained;

xiii. followup on execution of decisions adopted in approved schemes of master plans of industrial parks and schemes for regularization of existing development and submittal of annual reports according to prescribed procedure on progress in their performance;

xiv. selective checks within the competence of the regional project planning organization to see that the project planning documentation prepared for construction of enterprises, buildings and structures conforms to the features of the TEO and to project planning assignments consented to, and

also to the Technical Rules on Economical Consumption of the Principal Building Materials, adopted by USSR Gosstroy.

All departures from the TEO, from project planning assignments, from decisions adopted in the approved schemes of master plans of industrial parks and schemes for regularization of existing development the regional project planning organization shall communicate to USSR Gosstroy and USSR Stroybank (USSR Gosbank), and it shall report failure to meet requirements of the Technical Rules on Economical Consumption of the Principal Building Materials to USSR Gosstroy;

xv. by agreement with the main developer of parkwide facilities (or his master project planner) of the proposed detailed layout of the industrial park and the working (official [dezhurnyy]) master plan of the industrial park.

8. The regional project planning organization shall bear responsibility for the competent and punctual performance of tasks and functions assigned it under the present Regulation.

3. Rights of the Regional Project Planning Organization of USSR Gosstroy

9. The regional project planning organization is hereby granted the following rights:

i. to familiarize itself with materials in ministries, departments, executive committees of Soviets of People's Deputies and their subordinate organizations, institutions and enterprises necessary to performance of the tasks and functions assigned it and to obtain data for the drafting of schemes of master plans of industrial parks, schemes for location of industrial enterprises to be planned and schemes for regularization of existing development;

ii. to demand of enterprises, organizations and institutions that they submit data and material necessary to drafting TEO's according to prescribed procedure and to the granting of consent for project planning assignments, and also that they submit project planning documentation for construction of industrial enterprises, buildings and structures in performance of spot checks;

iii. to engage project planning organizations for town construction, for specialized fields and for industrial production engineering in the prescribed procedure to prepare the respective sections of schemes of master plans of industrial parks, schemes for location of industrial enterprises being planned and schemes for regularization of existing development, and also to follow up performance of decisions embodied in those schemes.

iv. to take part in the examination by ministries, departments and executive committees of Soviets of People's Deputies of TEO's for construction

(reconstruction) of industrial enterprises, buildings and structures, schemes of master plans of industrial parks and schemes for regularization of existing development, and also the examination of project planning assignments when decisions are being made on location of industrial enterprises and their utility installations, the use of principal building materials, establishment of the size of health safety zones and adherence to current legislation of the USSR and union republics with respect to environmental protection.

List of Regional Project Planning Organizations of USSR Gosstroy Adopted Under Decree No 48 of USSR Gosstroy Dated 30 March 1979

No	Name of Regional Project Planning Organizations, Department They Belong to and Their Location	Name of Republics, Krays and Oblasts in Which Regional Project Planning Organizations Perform Their Functions
RSFSR		
1	State Order of Labor Red Banner Project Planning Institute "Leningrad Promstroyproyekt" of USSR Gosstroy, Leningrad	Komi ASSR, Karel'skaya ASSR, Murmanskaya, Arkhangel'skaya and Kaliningradskaya oblasts, and Cherepovets Industrial Park in Vologodskaya Oblast
2	No 1 Project Planning Institute of USSR Gosstroy, Leningrad	Leningradskaya, Novgorodskaya and Pskovskaya oblasts and Vologodskaya Oblast except for the Cherepovets Industrial Park
3	State Order of Labor Red Banner Project Planning Institute "Promstroyproyekt" of USSR Gosstroy, Moscow	Moscow and Moskovskaya, Kalininskaya, Smolenskaya and Ryazanskaya oblasts
4	State Project Planning Institute "Goskhimproyekt" of USSR Gosstroy, Moscow	Bryanskaya, Kaluzhskaya, Orlovskaya and Tul'skaya oblasts
5	State Project Planning Institute "Gor'kovskiy Promstroyproyekt" of the USSR Ministry of Construction, Gor'kiy	Mariyskaya, Chuvashskaya and Mordovskaya ASSR and Gor'kovskaya and Kirovskaya oblasts
6	Volzhskiy branch of the State Project Planning Institute "Goskhimproyekt" of USSR Gosstroy, Volzhskiy	Kalmytskaya ASSR and Astrakhanskaya and Volgogradskaya oblasts
7	State Project Planning Institute "Kuybyshevskiy Promstroyproyekt" of the USSR Ministry of Industrial Construction, Kuybyshev	Tatarskaya ASSR and Kuybyshevskaya Oblast

No	Name of Regional Project Planning Organizations, Department They Belong to and Their Location	Name of Republics, Krays and Oblasts in Which Regional Project Planning Organizations Perform Their Functions
8	State Project Planning Institute "Saratovpromproyekt" of the USSR Ministry of Construction, Saratov	Saratovskaya, Penzenskaya and Ul'yanskaya oblasts
9	State Project Planning Institute "Giprom" of the USSR Ministry of Construction, Voronezh	Belgorodskaya, Voronezhskaya, Kurskaya, Lipetskaya and Tambovskaya oblasts
10	Project Planning and Scientific Research Institute "Rostovskiy Promstroyniprojekt" of USSR Gosstroy, Rostov-na-Donu	Rostovskaya Oblast, Krasnodarskiy and Stavropol'skiy krays and Dagestanskaya, Kabardino-Balkarskaya, Severo-Osetinskaya and Chechino-Ingushskaya ASSR
11	State Project Planning and Scientific Research Institute "Chelyabinskiy Promstroyniprojekt" of the USSR Ministry of Construction of Heavy Industry Enterprises, Chelyabinsk	Kurganskaya, Orenburgskaya and Chelyabinskaya oblasts
12	Project Planning Institute "Perm-promproyekt" of the USSR Ministry of Industrial Construction, Perm'	Udmurtskaya ASSR and Permskaya Oblast
13	Project Planning and Scientific Research Institute "Ural'skiy Promstroyniprojekt" of USSR Gosstroy, Sverdlovsk	Sverdlovskaya Oblast
14	Project Planning Institute No 2 of USSR Gosstroy, Moscow	Vladimirskaya, Ivanovskaya, Kostromskaya and Yaroslavskaya oblasts and Khanty-Mansiyskiy and Yamalo-Nenetskiy national districts
15	State Project Planning Institute "Tyumenskiy Promstroyproyekt" of the USSR Ministry of Industrial Construction, Tyumen'	Tyumenskaya Oblast except for Khanty-Mansiyskiy and Yamalo-Nenetskiy national districts
16	Ufa affiliate of the institute "Tyumenskiy Promstroyproyekt" of the USSR Ministry of Industrial Construction, Ufa	Bashkirskaya ASSR
17	State Project Planning Institute "Sibirskiy Promstroyproyekt" of USSR Gosstroy, Novokuznetsk	Altayskiy Kray and Kemerovskaya Oblast
18	State Project Planning Institute "Novosibirskiy Promstroyproyekt" of the USSR Ministry of Construction, Novosibirsk	Novosibirskaya, Omskaya and Tomskaya oblasts

No	Name of Regional Project Planning Organizations, Department They Belong to and Their Location	Name of Republics, Krays and Oblasts in Which Regional Project Planning Organizations Perform Their Functions
19	Project Planning and Scientific Research Institute "Krasnoyarskiy Promstroyniiprojekt" of the USSR Ministry of Construction of Heavy Industry Enterprises, Krasnoyarsk	Tuvinskaya ASSR and Krasnoyarskiy Kray
20	State Project Planning Institute "Irkutskiy Promstroyproyekt" of USSR Gosstroy, Irkutsk	Buryatskaya ASSR, Yakutskaya ASSR and Irkutskaya and Chitinskaya oblats
21	Project Planning Institute "Khabarovskpromproyekt" of the USSR Ministry of Construction of Heavy Industry Enterprises, Khabarovsk	Khabarovskiy Kray and Amurskaya Oblast
22	Project Planning and Scientific Research Institute "Dal'nevostochnyy Promstroyniiproyekt" of the USSR Ministry of Construction, Vladivostok	Primorskiy Kray and Sakhalinskaya and Kamchatskaya oblats
23	State Project Planning Institute "Dal'stroyproyekt" of the USSR Ministry of Nonferrous Metallurgy, Magadan	Magadanskaya Oblast
Ukrainian SSR		
24	Project Planning and Scientific Research Institute "Khar'kovskiy Promstroyniiproyekt" of USSR Gosstroy, Khar'kov	Khar'kovskaya, Poltavskaya, Sumskaya and Chernigovskaya oblats
25	State Project Planning Institute "Pridneprovskiy Promstroyproyekt" of USSR Gosstroy, Dnepropetrovsk	Dnepropetrovskaya and Kirovogradskaya oblats
26	Zaporozh'ye branch of the State Project Planning Institute "Pridneprovskiy Promstroyproyekt" of USSR Gosstroy, Zaporozh'ye	Zaporozhskaya, Krymskaya, Khersonskaya and Cherkasskaya oblats
27	State Project Planning and Scientific Research Institute "Donetskiy Promstroyniiproyekt" of USSR Gosstroy, Donetsk	Donetskaya and Voroshilovgradskaya oblats
28	State Project Planning Institute "Kiyevskiy Promstroyproyekt" of USSR Gosstroy, Kiev	Kiyevskaya, Zhitomirskaya, Vinitskaya, Khmel'nitskaya, Ternopol'skaya and Chernovitskaya oblats

<u>No</u>	<u>Name of Regional Project Planning Organizations, Department They Belong to and Their Location</u>	<u>Name of Republics, Krays and Oblasts in Which Regional Project Planning Organizations Perform Their Functions</u>
29	Odessa Project Planning Institute No 3 of the USSR Ministry of Industrial Construction, Odessa	Odesskaya and Nikolayevskaya oblasts
30	L'vov affiliate of Odessa Project Planning Institute No 3 of the USSR Ministry of Industrial Construction, L'vov	L'vovskaya, Volynskaya, Zakarpatskaya, Ivano-Frankovskaya and Rovenskaya oblasts
Belorussian SSR		
31	Belorussian State Project Planning Institute "Belpromproyekt" of Belorussian Gosstroy, Minsk	Belorussian SSR
Uzbek SSR and Turkmen SSR		
32	State Project Planning Institute "Uzgiptyazhprom" of USSR Gosstroy, Tashkent	Uzbek SSR and Turkmen SSR
Kazakh SSR		
33	State Project Planning and Scientific Research Institute "Kazakhskiy Promstroynilproyekt" of USSR Gosstroy, Alma-Ata	Kazakh SSR except for Karagandinskaya and Dzhezkazganskaya oblasts
34	State Project Planning Institute "Karagandinskiy Promstroyproyekt" of the USSR Ministry of Construction of Heavy Industry Enterprises, Karaganda	Karagandinskaya and Dzhezkazganskaya oblasts
Georgian SSR		
35	State Project Planning Institute "Gruzgosproyekt" of the USSR Ministry of Construction, Tbilisi	Georgian SSR
Azerbaijan SSR		
36	State Project Planning Institute "Azgospromproyekt" of USSR Gosstroy, Baku	Azerbaijan SSR

No	Name of Regional Project Planning Organizations, Department They Belong to and Their Location	Name of Republics, Krays and Oblasts in Which Regional Project Planning Organizations Perform Their Functions
	Lithuanian SSR	
37	Institute for Project Planning of Industrial Construction "Litpromproyekt" of Lithuanian Gosstroy, Kaunas	Lithuanian SSR
	Moldavian SSR	
38	State Project Planning Institute "Moldgiproprom" of Moldavian Gosstroy, Kishinev	Moldavian SSR
	Latvian SSR	
39	State Institute for the Project Planning of Industrial Enterprises "Latgiproprom" of Latvian Gosstroy, Riga	Latvian SSR
	Kirgiz SSR	
40	State Project Planning Institute "Kirgizpromproyekt" of the USSR Ministry of Construction, Frunze	Kirgiz SSR
	Tadzhik SSR	
41	State Project Planning Institute "Tadzhikgiproprom" of Tadzhik Gosstroy, Dushanbe	Tadzhik SSR
	Armenian SSR	
42	State Project Planning Institute "Armpromproyekt" of Armenian Gosstroy, Yerevan	Armenian SSR
	Estonian SSR	
43	State Project Planning Institute "Estpromproyekt" of Estonian Gosstroy, Tallin	Estonian SSR

List of Decisions of USSR Gosstroy Which Have Been Invalidated

1. Paragraph 1 of Point 15 of USSR Gosstroy Order No 286 dated 10 October 1963 and entitled "On Establishing Order in Construction Project Planning of Industrial Enterprises and Production Facilities of Agriculture";
2. Subpoint b of Point 1 of USSR Gosstroy Order No 16 dated 30 January 1965 on retaining for the institute "Latgiprom" the rights and duties of a regional project planning organization of USSR Gosstroy;
3. Subpoint b of Point 1 of USSR Gosstroy Order No 17 dated 30 January 1965 on retaining for the institute "Armpromproyekt" the rights and duties of a regional project planning organization of USSR Gosstroy;
4. USSR Gosstroy Order No 24 dated 5 August 1965 on assigning the functions of a regional project planning organization of USSR Gosstroy to the State Project Planning Institute "Gor'kovskiy Promstroyproyekt";
5. Point 2 of USSR Gosstroy Order No 132 dated 11 August 1965 on retaining for the Institute for Industrial Construction Project Planning of Lithuanian Gosstroy the functions of a regional project planning organization of USSR Gosstroy;
6. USSR Gosstroy Order No 181 dated 12 October 1965 on including the project planning and scientific research institute "Donetskiy Promstroynii-proyekt" on the list of regional project planning organizations and on retaining for the State Project Planning Institute "Pridneprovskiy Promstroyproyekt" the functions of a regional project planning organization of USSR Gosstroy;
7. Subpoint b of Point 1 of USSR Gosstroy Order No 28 dated 25 March 1966 on retaining for the institute "Belpromproyekt" the functions of a regional project planning organization of USSR Gosstroy;
8. Point 1 of USSR Gosstroy Order No 7 dated 20 October 1967 on including the institute "Goskhimproyekt" on the List of Regional Project Planning Organizations of USSR Gosstroy;
9. USSR Gosstroy Order No 31 dated 7 July 1969 on assigning to the Zaporozh'ye branch of the institute "Pridneprovskiy Promstroyproyekt" the functions of a regional project planning organization;
10. USSR Gosstroy Decree No 88 dated 23 July 1970 and entitled "On Adoption of the Regulation on the Regional Project Planning Organization of USSR Gosstroy";
11. Point 1 of USSR Gosstroy Decree No 75 dated 30 April 1972 and entitled "On Assignment of the Functions of a Regional Project Planning Organization of USSR Gosstroy to the Institute 'Irkutskiy Promstroyproyekt'";

12. Point 1 of USSR Gosstroy Decree No 100 dated 26 May 1972 and entitled "On Assignment of the Functions of Regional Project Planning Organizations of USSR Gosstroy to the Institute 'Kiyevskiy Promstroyproyekt' and the Affiliate of Project Planning Institute No 3 in L'vov";
13. Point 1 of USSR Gosstroy Decree No 42 dated 20 March 1972 on assignment of functions of regional project planning organizations of USSR Gosstroy to Project Planning Institute No 2 and to the affiliate of the institute "Permstroyproyekt" in Tyumen';
14. USSR Gosstroy Decree No 183 dated 1 October 1973 and entitled "On Assignment of the Functions of a Regional Project Planning Organization of USSR Gosstroy for Dzhuzkaskanskaya Oblast to the Karaganda Branch of the State Project Planning Institute 'Chelyabinskii Promstroyproyekt' of the USSR Ministry of Construction of Heavy Industry Enterprises";
15. USSR Gosstroy Decree No 204 dated 14 November 1973 and entitled "On Supplementation of the Regulation on the Regional Project Planning Organization of USSR Gosstroy";
16. Point 1 of USSR Gosstroy Decree No 106 dated 23 June 1975 and entitled "On Assignment of the Functions of a Regional Project Planning Organization of USSR Gosstroy to the Institute 'Promstroyproyekt' and Project Planning Institute No 2 of USSR Gosstroy";
17. USSR Gosstroy Decree No 123 dated 25 July 1975 and entitled "On Assignment of the Functions of a Regional Project Planning Organization of USSR Gosstroy for Ryazanskaya Oblast in RSFSR to the Institute 'Promstroyproyekt' of USSR Gosstroy";
18. Point 1 of USSR Gosstroy Decree No 71 dated 14 May 1976 and entitled "On Assignment of the Functions of a Regional Project Planning Organization of USSR Gosstroy for Yakutskaya ASSR to the Institute 'Irkutskiy Promstroyproyekt' of USSR Gosstroy";
19. Point 1 of USSR Gosstroy Decree No 86 dated 17 June 1976 and entitled "On Assignment of the Functions of a Regional Project Planning Organization of USSR Gosstroy for Khersonskaya Oblast of Ukrainian SSR to the Zaporozh'ye Branch of Pridneprovskiy Promstroyproyekt of USSR Gosstroy";
20. Point 1 of USSR Gosstroy Decree No 221 dated 27 December 1976 and entitled "On Assignment of the Functions of a Regional Project Planning Organization of USSR Gosstroy for Bashkirskaya SSSR to the Affiliate of the Institute 'Kuybyshevskiy Promstroyproyekt' of the USSR Ministry of Industrial Construction in Ufa";
21. Point 1 of USSR Gosstroy Decree No 133 dated 18 July 1978 and entitled "On Assignment of the Functions of a Regional Project Planning Organization of USSR Gosstroy for Moldavian SSR to the Institute 'Moldgiproprom' of Moldavian Gosstroy."

CONSTRUCTION

ELEMENTS OF HOUSING CONSTRUCTION DESCRIBED

Moscow ZHILISHCHNOYE STROITEL'STVO in Russian No 11, Nov 79 pp 9-11

[Article by I. I. Borovkov, candidate of economic sciences (Tash ZNIIEP) [expansion unknown]: "The Construction Production System on the Same Level with Modern Problems"]

[Text] At the present time qualitative changes in housing construction are related to improvements in amenities, expanding the use of mechanical equipment in housing units, decreasing the time needed to put them into operation, developing the contract method of construction, expanding specialization among construction-assembly organizations, transferring construction processes to plant facilities, increasing the role of scientific research and planning, and perfecting rate-fixing planning and financing for housing construction. The sphere of activity for housing construction includes organizational, planning, financing, scientific research, design and production (construction and industrial) work. All types of this activity, due to the common nature of their final results which are expressed in the efficiency and quality of the erected dwelling, should be considered as interconnected links in a common construction production system.

In order to satisfy the growing demand for improved efficiency and quality in housing construction it is necessary to solve a number of methodological and practical problems, to strengthen the production and financial ties between all the links in the housing construction production system and to improve planning, organization and economic stimulation for each of these links in accordance with the specific character of their activities and their common nature relative to the end results.

Such a complex approach for ensuring an increase in efficiency and an improvement in quality for housing construction was stipulated by the tasks set forth by the 25th CPSU Congress. The recently approved CPSU Central Committee and USSR Soviet of Ministers Decree "Concerning an Improvement in Planning and Increasing the Influence of the Economic Mechanism to Improve Production Efficiency and the Quality of Work" also speaks of the necessity of such an approach.

One of the most important links in the production system is scientific research. Results of scientific research--norms, standards, recommendations and individual developments which are introduced in planning, designing and producing construction materials and articles--predetermine to a great degree the efficiency and quality of construction. Scientific and technological progress is accompanied by the increased role of scientific research in the development of housing construction which brings about the necessity of creating a precise system for organizing, completing and implementing scientific research work and for economic stimulation designed to improve the quality and efficiency of scientific research.

In our view the foundation for organizing NIR (scientific research work) should be the primary link--the research group, headed by the chief scientific worker, whose make up is determined by the profile and nature of the research which is being done. The structure of an NII [Scientific Research Institute] and its subdivisions should produce an optimum combination of these groups and correspond to the tasks of the institute, its divisions and laboratories. Close cooperation between research groups and strengthening their production ties with other subdivisions of an NII may be achieved by means of operative planning for NIR, and the necessary cooperation between civil housing construction institutes and scientific institutions that deal with social, sanitary-hygienic and other housing problems may be achieved by means of developing complex special purpose programs and by carrying out joint thematic and coordination plans.

In order to increase the level of organization and efficiency in scientific research it is necessary to transfer to continuous planning for NIR according to the length of time the ongoing planning is to be in effect (from annual planning to two-year planning while each year drawing up the plan for the second year and clarifying the plan for the first year) and to transfer to planning the whole "research-production" cycle, which is achieved by means of organizing complex planning tasks while indicating the time needed for completing individual stages of this cycle and the volume of financing for it.

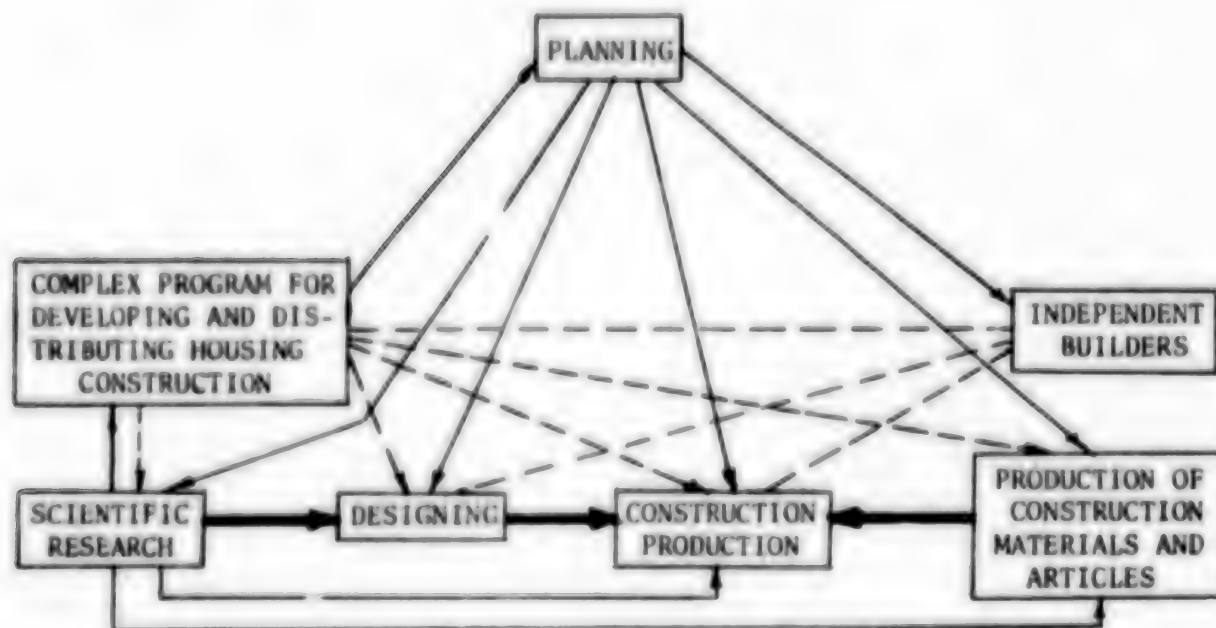
Economic stimulation of research groups should be structured relative to the quality of completed work and the efficiency in the results which were introduced. The criterion for this efficiency is the degree to which economic and social effects are derived. Considering the duration of the "research-production" cycle it is expedient to carry out material stimulation in two stages: the first stage, in the form of advance payments depending on the quality of the NIR and the degree of anticipated effect; the second, depending on the actual economic and social-economic effect derived from implementing the NIR.

In order to utilize the system of economic stimulation it is necessary to develop both a proficiency check of the assumptions for determining

the quality and efficiency of NIR and an evaluation of the activities of scientific subdivisions. When working out these assumptions the experience gained by Tashkent ZNIEP in improving methods of evaluating the quality and efficiency of NIR may be used.* Scientific research is also necessary as a basis for a complex program for the development and distribution of housing construction and to work out this program which would determine the purposefulness and efficiency of the functions of all of the links in the construction production system.

The complex program envisions a rational means for solving problems that originate from the growing demands of the population and the capabilities of the state by considering the development of social-economic and scientific-technical progress. The complex programs for developing and distributing housing construction improve the scientific foundation of current planning that is the basis for organizing the functional ties between all the links in the housing construction production system. (See chart below.)

Basic links in the housing construction production system and their production and functional ties



*Vorokov, I. I. "Experiences in Improving Methods of Evaluating the Quality and Efficiency of Scientific Research Work," Standards and Quality, 1979, No 3.

At the present time measures are being taken to improve planning for housing construction by means of determining its planning structure and the average estimated cost for one square meter of the total area in housing units for the republics, oblasts and cities. However, as practice shows this structure, in the majority of cases, does not reflect the optimum correlation of housing units according to their structural type and number of stories but fixes only the existing tendencies of this correlation. The knowledge obtained from the work done by the Kiev ZNIEP has shown that an effective method of acquiring an optimum planning structure for housing construction is the broad use of economic-mathematics methods and an EVM for calculations.

Side by side with determining the optimum planning structure for housing construction and with determining the organization of functioning bank controls to maintain it, it is necessary to introduce into practice for planning and calculations the following standard state indices for the quality of housing construction and the housing fund: the soundness of construction (related to standard times of service for buildings), category of mechanical equipment (according to the classification in the current statistical accounts) and the level of planned amenities in housing units (related to the degree of innovation standards which were designed for this housing unit). These three indices can characterize, to a sufficient degree, the qualitative structure of housing units which are put into operation and of the existing housing fund for the country, its regions and separate inhabited areas.

Another very important link in the housing construction production system is design, during the process of which the model for the future housing unit, microrayon and populated area is worked out as a whole and which predetermines the quality and efficiency of their influence.

At the present time a new system of planning and economic stimulation is being introduced at design organizations which is aimed at increasing the technical level and quality of design, at lowering the estimated cost of construction and at providing construction jobs with complete design-estimate documentation on time.

As practice shows, by introducing this system, profits, which are not directly related to the quality and efficiency of design decisions and which are derived from implementing these designs, are a basic source of producing funds for the economic stimulation of design organizations that are engaged in housing construction. Yet the chief index for evaluating the activities of design organizations and the principal criteria for economic stimulation of design organizations should be the efficiency which is achieved in design decisions. Such an index and criteria can serve to define the ratio of the evaluated

quality of a design to the expenditures for erecting and utilizing structures when designing these structures for non-production use. The proposed ratio and its growth will reflect the direct results of improving the quality of housing designs relative to the expenditures for erecting it.

In relation to this, the problem of developing a common standard document for determining the quality of a design for a housing unit arises. At present, similar documents are being developed and are undergoing experimental testing at the Leningrad ZNIEP, the Kiev ZNIEP and a number of other institutes. A "characteristics chart" was used as a methodological basis for developing these documents, which made it possible to work out the principles and criteria needed to evaluate the quality of designs in accordance with the theory for gauging quality.* In the absence of practical experience technological-economic indices for housing designs, in our opinion, need not be included in the "characteristics chart" since they characterize the efficiency of design decisions and not quality.

Housing construction combines and construction-assembly organizations are implementing the results of scientific research which has worked out designs and a complex program for developing and distributing housing construction. Construction production is the final and principal link in the housing construction system which constitutes 45 percent of all expenditures for housing construction. The volume of housing construction, the time needed to put housing units into operation, the level of expenditures for construction-assembly work, and the quality of the implemented design all are related to construction production.

The experience gained from the work done by construction organizations in the BSSR Ministry of Industrial Construction shows that the calculations used to put housing units into operation along with the complex of exterior structures and landscaping should become an effective stimulus for reducing the length of time in housing construction. At the same time it is expedient to differentiate the volume of payments for the finished structure depending on the quality of the completed construction assembly work.

The quality of housing construction depends a great deal on introducing typical designs into construction practice and on broadening products lists for housing designs and block sections which have been worked out. Relative to this the necessity arises of organizing a system

* Azgal'dov, G. G., Sokov, A. V. "Concerning the Properties Which Characterize the Quality of Housing Designs," Zhilishchnoye Stroitel'stvo, 1973, No 2.

of economic stimulation for production and construction of new improved types of housing units and block sections that, together with calculations for finished structures and depending on the quality of the finished construction-assembly work, will serve as an important stimulus for improving the quality of housing construction.

In recent years the role of the independent builder, as one of the interrelated links in the housing construction system, has grown in connection with the development of the contract method of completing construction-assembly work, the increased requirements for organizing preparatory work for construction and financing and the technical supervision needed for it. Closer cooperation between clients and contract organizations is needed during preparations for construction work, while completing it and when housing units are put into operation "based on interrelated indices and equal responsibility for the final results of the work."*

The principal supplier of material resources for construction production is the construction materials and articles industry. With the development of technological progress and by transferring construction processes to shops the role of industrial production of construction materials and articles in providing housing construction with material resources and in increasing the efficiency and quality of erecting buildings is steadily growing. The portion of construction materials and articles that are manufactured by industry comes to half of all the material resources used in housing construction and the specific proportion that this sector of industry comprises of the total cost of a housing unit is 25 percent. Not only the cost of producing construction materials and articles but also the level of its plant preparedness, transportability, technique for assembly and its durability, aesthetic and other consumer qualities have a direct influence on the estimated cost, labor consumption and funds needed for construction, on the durability and quality of the erected housing unit and its utilization expenditures. Therefore, the criterion for selecting construction materials and articles should not only be economy of production but most of all the efficiency in using them during construction and in utilizing the buildings and structures.

In order to increase the interest of enterprises in the final results achieved in housing construction the new advanced system of calculations used for suppliers of complete sets of articles, which considers their quality and time needed to supply them, should be supplemented by economic stimulation for producing efficient structures, parts and

* Ivanov, V. G. "Evaluating the Activities of Contractors and Clients on the Basis of the Final Results," Ekonomika Stroitel'stva, 1978, No 9.

materials which are used in construction and for compensating for losses sustained during the transition period when manufacturing a new product. The sources of financing in the above instance should be obtained from DSK [Housing Construction Combine] and construction organizations' funds that are received by them from clients for adopting new series of typical designs and for putting high quality structures into operation.

Together with increasing economic stimulation and improving the organization of each of the links in the housing construction system it is necessary to strengthen the production and functional interrelations of these links to achieve the end results of increased efficiency and quality in housing construction.

As experience has shown at Orel construction sites and other cities in the country, closer ties between all participants in civil housing construction are achieved by organizing the complex uninterrupted planning and continuous construction methods. Introduction of the "Orel uninterrupted process" improves consistency, decreases the time needed to put housing units into operation, improves the quality of housing construction and the efficiency of construction production.

The principal task for strengthening the organizational ties between the links in the housing construction system to achieve the overall end results is to unify the civil housing construction clients in the cities and oblasts of the country and to disseminate the advanced knowledge gained at Orel and Yaroslavl' construction sites.

Along with this it is necessary to search for new organizational forms of management for civil housing construction which would join all of the principal links into a single complex similar to a scientific-production combine. The principal technological processes in housing construction (production of construction articles, their transportation and assembly and the finish work for a building) were effectively consolidated at housing construction combines. The tendency of the organizational associations of these combines to cooperate with production associations (for example, the Uzbek SSR Ministry of Urban Construction) deserves attention. The knowledge gained of the organizational ties between the enterprises, construction, design, and scientific research organizations in the Main Moscow Construction Directorate is of great value. A significant amount of knowledge of the organization of scientific production associations has been accumulated in a number of sectors of industry. This knowledge may be used when the principles of organization and the function of scientific production associations in civil housing construction are being developed and when these principles are being scientifically tested on the basis of the construction work done by one of the oblast centers or by one of the capitals of a union republic.

Experimental tests of the principles which have been developed for the creation of scientific-production associations and an analysis and correlation of this knowledge will make it possible to determine ways of improving the organizational forms of management for civil housing construction in accordance with social-economic and scientific-technological progress.

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CONSTRUCTION

BELORUSSIAN EXPERIMENTAL CONSTRUCTION MANAGEMENT SCHEME EVALUATED

Minsk SOVETSKAYA BELORUSSIA in Russian 8 Dec 79 p 2

[Article by I. Mozolyako, BSSR [Belorussian SSR] Ministry of Industrial Construction: "The Goal Is a Finished Product"; passages enclosed in slantlines printed in boldface]

[Text] It has been almost 4 years now that the BSSR Ministry of Industrial Construction has been carrying out a comprehensive economic experiment. Its main purpose and direction are well known. These are to raise the effectiveness of construction operations by reducing the time taken to erect facilities, to bring the amount of uncompleted construction down to the standard amount and to create a long-term industrial-type flow-line operation.

/It was decided to achieve the intended purpose by improving the planning and intensifying the effects of economic levers on the managerial activity of all our subunits. In so doing, the introduction of facilities and the construction commodity product became the main evaluation indicators. The ministry and all construction subunits converted to settlements for finished jobs or complexes, the use of credit for uncompleted construction instead of obtaining an advance from the client, and full economic accountability. We are basing our daily activity on precisely these factors./

The question arises logically: what was done during this time? With regard to the main specific problem--the introduction of facilities--then indisputable changes for the better have occurred here. In 3½ years the ministry turned over for operation 2,870 facilities for industrial, housing and nonindustrial purposes. This, it is true, was 97.5 percent of that planned. However, it must be considered that during this period many new facilities and capacity were put into operation ahead of above the plan. This includes a plant for protein-vitamin concentrates in Novopolotsk, a crushing and grading plant in Mikashevichi, capacity at the Mogilev Silk-Textile Combine, the Minsk Worsted Combine, the Grodno Clothing Factory and a poultry plant in Baranovich rayon, and other facilities.

During the first 3 quarters of the year alone the Ministry put 309 facilities into operation. Behind this figure stand 1,349,000 square meters of housing, 20 children's institutions, 21 schools, 6 hospitals, 4 polytechnics and 4 vocational and technical schools.

Since the start of the five-year plan we have reduced the time taken to erect facilities by 14 percent, and uncompleted construction has been brought down to the norm. Moreover, the average annual growth of finished output has greatly exceeded the growth pace in amount of construction and installing work.

As we see, evaluating the builders' activity by commodity output has motivated us directly to approximate the deadlines for the introduction of jobs and has forced us to concentrate supplies, equipment and other resources primarily on construction projects due for startup. The one who acts thus under the new management terms unfailingly enjoys success.

/Soligorsk Trust No 3, for example, was required to introduce capacity of the first phase of the 4th Ore Administration of Beloruskaliy Association. About 100 buildings and structures, including a number of specially built structures--the tower headwork of the third mine shaft, the main building of Chemical Factory No 1, and many others--were to be erected. The trust concentrated its supplies and equipment and human resources to the maximum, as did the subcontractors, who number more than 30 here. And here is the result: while construction of the 3d Ore Administration took 5 years, construction of the 4th (the cost, incidentally, was 30 million rubles more) took 3 years. All this allowed the Soligorskiers to realize a construction commodity output for the 4th Ore Administration alone of more than 45 million rubles in 1978. The profit, in so doing, was 3,066,000 rubles.

Brest Construction Trust No 8 is concentrating resources wisely and thriftily and is assuring the introduction of jobs ahead of time. During the past 3 years and 9 months it was to turn over for operation 108,400 square meters of total housing space, but the city's residents received 115,500. During this same period it had been planned to turn over for operation 113 facilities of industrial, municipal, social and personal-services purposes, but 119 were introduced. Labor productivity rose by 21.8 percent.

Trust No 17 of Lavsanstroy, Trust No 19 (Lida city) and the Minsk Production Association for Industrialized Housing Construction imeni 50-Letiya SSSR, Trust No 1 (Minsk city) and other subdivisions of the ministry achieved good indicators. In brief, those organizations that have set up their economic and organizational work realistically and sensibly are successfully putting to use the inexhaustible reserves that are concealed in the progressive management system./

The great force of low-level economic accountability that is acting to raise the effectiveness of all our activity under the terms of the economic experiment cannot be overlooked. The experiment's economic mechanism,

which is aimed at accelerating the introduction of jobs, creates fertile soil for the solidification and the large-scale introduction of the brigade contract. Here is what the figures say about that. While 56.4 percent of all the ministry's construction and installing work was carried out under brigade contract in 1976, the figure for 1978 was 71.4 percent.

Development of the brigade contract under the terms of the economic experiment has opened up new paths for stirring up socialist competition and aiming it directly at a reduction of building time and at effectiveness and quality. Innovators and authentic labor heroes were born during the competition. Many of them have already carried out the five-year task. These are the integrated brigade of Yakov Koval'kov, the slablayers brigade of Petr Gerasimov of Trust No 17 of Lavsanstroy, the integrated mason's brigade of Hero of Socialist Labor Mikhail Kupa, the roofers' brigade of Iosif Rakovskiy from Grodno Trust No 30, the plasterers' brigade of Irina Storubleva from Soligorsk Trust No 3, the painters' brigade of Stanislav Gopeyenko of Orsha Trust No 18, excavator operator Vladimir Gonchar of Stroymekhanizatsiya [Construction Mechanization Trust], bulldozer operator Mikhail Chernyavskiy of Lida Trust No 19, and others.

It does not follow from what has been said, however, that matters are going well in the ministry's subunits. In evaluating what has been achieved from the standpoint of the requirements that Comrade L. I. Brezhnev set forth in his speech at the November 1979 CPSU Central Committee plenum, we see that not by far have we used the opportunities that have been opened up before us and have not brought all available reserves to bear. For example, we had many failures and omissions that did not stem from the new management system. The reasons were concealed elsewhere: in our own seriously incomplete work and miscalculations. It is these that explain the fact that this year a large number of jobs for various purposes were not introduced. It must be said in self-criticism that no little guilt here lies with the ministry. Some of our trusts, particularly No 6 (the manager is M. A. Zakhozhiy), No 13 (the manager is M. D. Plekhotkin), No 21 (the manager is N. I. Popov) and others were clearly working unsatisfactorily. They were not able to guide properly the efforts of their collectives and the supply and equipment resources that were at their disposal to unconditional fulfillment of the goals that had been set.

Comrade P. M. Masherov, Candidate Member of the CPSU Central Committee Politburo and First Secretary of the Central Committee of the Belorussian Communist Party, subjected the builders to sharp criticism for serious failures and omissions. We have drawn conclusions from this criticism and are taking the necessary steps to eliminate the deficiencies.

Even so, the following should be said for the sake of truth: the builders also often commit interruptions because of the serious omissions of interdependent enterprises. During the first 9 months of this year alone, deliveries to us were short by 23,000 tons of rolled metal, more than 96,000 tons of cement, 44 million bricks and 670,000 cubic meters of crushed rock.

/A lack of preparation by our clients adversely affected the ministry's activity. Thus, technical documents for more than 90 million rubles' worth of work were not received on time for the 1979 plan year, and this was true for more than 300 million rubles' worth of work for the first 3 years of the five-year plan. These amounts were 10-12 percent of the planned amount of work.

A similar situation prevailed among clients with regard to industrial equipment. As many as 30,000 units had not been delivered by the established deadlines. Therefore, many jobs proved to be not fully outfitted. In many instances construction sites had not been released and financing opened up on time./

Despite great difficulties and complexities, the builders were obligated to solve the main task--to introduce the jobs called for by the plan. It is to just this end that we are today directing the main attention of all our subunits, in light of the requirements of the November 1979 plenum of the CPSU Central Committee.

However, simultaneously, the tasks of the next and concluding year of the five-year plan remain on the agenda. Their solution must be approached to take into account the party's and government's requirement that the planning and management mechanism be improved. What we have done by way of experiment has now become the norm for everyday activity for all. The demands made on us, the pioneers, is special--it is even more necessary that we set the tone in this important state matter.

/Unfortunately, even now we are seeing symptoms of last year's sickness. We understand well that the results the ministry will have to show at the threshold of the Eleventh Five-Year Plan will depend upon the plan's balancing and the quality of engineering preparation for operations. Therefore, back at the start of June we examined with all the clients their orders for 1980. The proposals, which were coordinated with the republic's gosplan, were sent to USSR Minpromstroy [Ministry of Industrial Construction] and USSR Gosplan. But an answer to our proposals still has not arrived./

The matter of design and budget-estimating documents is going extremely unsatisfactorily. On the first of September it was missing for 40 million rubles' worth of work. Even today designs and budget estimates have not been provided for more than 100 jobs. The matter of deliveries of the industrial equipment is not completely clear.

All this does not allow us to prepare for the erection of facilities and to create the necessary production base in good time. The builders cannot order metal structure, requisition materials, or prepare production facilities for the manufacture of prefabricated reinforced concrete. In brief, a large number of various "kinks" that prevent the execution of comprehensive preparation for successful completion of the current five-year plan is emerging.

We have a right to expect that planning organs will do all that is necessary during the remaining period to confirm for the ministry the plan for 1980, which is strenuous but completely realistic and balanced with the capacity of the construction organizations. The program for next year should be "purged" of facilities that were not provided on time with documentation and for which the question of delivering equipment still has not been finally resolved to this day.

/Beyond the current concern, one cannot forget about the prospects for development. The ministry has already taken concrete steps in this regard. In particular, much work is being done to improve the prefabricated reinforced-concrete industry. A large association for the manufacture and erection of the frameworks of industrial buildings and structures has been created. A number of measures for improving the use of the available capacity at existing enterprises is called for. The manufacture of heavily produced structure is to be brought closer to the places of their concentrated use next year.

In developing the in-house production base, stress is being given to rebuilding and to reequipping with machinery. A whole set of measures in the area of introducing new equipment, progressive materials, structure and mechanization equipment is contemplated. An average of 75 percent of the builders throughout the ministry will have been provided with standard sets of progressive tools for the basic specialties by the end of 1980.

Engineering calculations should become the basis of all the solutions adopted. There is a special place for developing an intraministry system to supply and outfit organizations with material resources in complete sets. Outfitting with complete sets of industrial equipment will become the sole form of delivering materials and products to job sites, and settlements for the sets of equipment will become the sole form of payment for resources received. Ways to improve radically the activity of the whole engineering corps are planned. This concerns primarily such subunits as the Orgtekhstroy Trust, the Central Standards Research Office, the Promstroy-sistema Association, the Orgstroy-mekhanizatsiya Trust and the engineering services of the construction organizations./

Experience in operating under the terms of the economic experiment that the ministry has accumulated undoubtedly is a good base for subsequent and complete implementation of the party's and government's requirements for improving planning and management mechanisms. In using all opportunities, the ministry's builders are applying maximum efforts to fulfill the strenuous goals of the current and the 1980 tasks, thereby creating a reliable base for a successful start on the Eleventh Five-Year Plan.

11409
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CONSTRUCTION

BELORUSSIA'S WORKERS EXHORTED TO MEET CONSTRUCTION GOALS

Minsk SOVETSKAYA BELORUSSIYA in Russian 12 Dec 79 p 3

[Article by A. Gorbachev: "Pay Attention to the Jobs Due for Startup"; passages enclosed in slantlines printed in boldface]

[Text] On the writing pad of the politinformator [political information officer].

There is in essence today no area of communist creation where further progress does not in some measure depend upon the skill and daily painstaking labor of the builders--representatives of one of our most respected vocations, people who are constantly introducing renewal into all spheres of our life.

"The sweep of creative activity of the Soviet people appears especially brightly in the enormous scale of construction," said Comrade L. I. Brezhnev at the November 1979 CPSU Central Committee Plenum. "Capital investment in the national economy during the 4 years will exceed 500 billion rubles. This will enable fixed productive capital to be greatly expanded. By the end of 1979 it will consist of more than a trillion rubles, and it will be updated by almost one-third--by 30 percent in industry and by 41 percent in agriculture."

/As much fixed capital is now being turned over for operation annually as was introduced during the first 33 years of Soviet power. Behind these figures are KamAZ [Kama Motor-Vehicle Plant], Atommash, the Sayano-Shushenskaya GES, the Leningradskaya, Kurskaya, Armyanskaya and Chernobylskaya nuclear-power stations, the Pavlodar oil refinery and many other giants of industry--in all, about 1,000 of the largest industrial enterprises, thousands of schools, hospitals, polyclinics, kindergartens, clubs and libraries, and 423 million square meetings of housing.

More than 100 new large enterprises have appeared on the map of our republic alone. Among them are the Grodno Synthetic-Fiber Plant, the Zhlobin Artificial Fur Factory, the Slonim Worsted Spinning Plant, the Molodechno Plant for Lightweight Metal Structure and Minskaya TETs No 4. The capacity of the Khimvolokno, Azot, Beloruskaliy, Gomsel'mash and BelavtoMAZ production associations, the Mozyr' and Novopolotsk petroleum refineries, the

Lukoml'skaya GRES and many other enterprises is being greatly increased. Housing is being built widely here, and facilities for social and personal services are being erected./

In revealing the role of construction workers in carrying out 25th CPSU Congress decisions, it is desirable that the politinformator cite concrete examples and facts from his own city or rayon.

And matters in the construction sector as a whole are still proceeding unfavorably. This shows up adversely in the solution of some economic and social tasks set by the party and government for the Tenth Five-Year Plan period. And Belorussia's builders have permitted a great lag at many of this year's important projects that are due for startup. This relates primarily to the collectives of trusts Nos 6, 9, 13 and 21 of BSSR [Belorussian SSR] Minpromstroy [Ministry of Industrial Construction] the Krichivsel'stroy, Minsk'sel'stroy and Grodnosel'stroy rural construction trusts of BSSR Minsel'stroy [Ministry of Rural Construction], the Grodnenskaya Oblast Association of Interkolkhoz Construction Organizations, Belдорstroy [Belorussian Road-Construction Trust] and Belenergostroy [Belorussian Power-Engineering Construction Trust], which did not know how to manage the supply and equipment resources allocated to them as they should have.

The builders are often and deservedly criticized for the disperison of material and human resources, poor discipline and work organization, unsatisfactory use of equipment and tools, defects and unfinished work that have been permitted, and a lack of close ties with interdependent activities. The burden of these deficiencies become especially grave at the end of the year, when there is a large-scale startup of facilities.

/The strenuous situation at many startup construction projects has also been complicated by a number of other factors. There have been serious disruptions in the arrival of design and budget-estimating documentation and of equipment. A large amount of basic construction materials and structure were not received, through the fault of construction-industry enterprises and transport workers. And the builders had to send substantial forces to the aid of rural workers because of the bad weather./

As a result, 49 percent of the fixed capital of the year's goals were to be put into operation in December. The task was extremely difficult and complex. Therefore, we can, with good grounds, call December a construction harvest season. Just like a regular harvest, the builders' current harvesting season requires maximum exertion, a complete mobilization of forces, and high consciousness and state of organization. For the current efforts at the jobs due for startup crown the labor of hundreds and thousands of people over the period of a year, and, at times, of several years.

/The Central Committee of the Communist Party of Belorussia and the republic's government are seriously concerned about the situation that has been created and in October adopted a special decree in which construction ministries and agencies and local party and soviet organs were charged

with thoroughly analyzing the state of affairs at the facilities to be introduced and refining the schedule for completion of the work at each of them, taking unconditional turnover for operation into account. The clients were to rapidly finish the complete outfitting of the projects due for startup with the equipment and materials that were lacking, and the motor transport workers and the railroaders were to give first priority to the hauling of the freight intended for them.

In order to cover the shortage of various types of materials and structure, enterprises of the republic's ministries of building-materials industry, timber and wood-processing industry and local industry were to complete specific tasks on the above-plan output and delivery of the numbers and amounts of articles and materials that were lacking. It was also decided to send more than 15,000 workers and specialists to the builders' aid by the end of the year from enterprises, organizations and kolkhozes and sovkhozes./

The measures adopted enabled the work pace to be greatly raised in a short time and the lag at many construction projects to be eliminated. For example, the shock Komsomol detachment sent by the Minsk Oblast Komsomol Committee demonstrated labor valor during erection of the 4th Ore Administration at Soligorsk. It was committed to doubly overfulfill the refined task.

However, not everywhere was help extended to the builders on time and in the required amount. The political information officers who speak to collectives that are making products for the builders or are called upon to help them in this important period should pay special attention to this. In some places motor vehicles and railroad cars loaded with construction freight are not being unloaded on time. In various places the labor of workers sent to contracting organizations is poorly organized, they are not included in the staffs of the brigades, are not assigned concrete tasks, and are not being provided with tools and special work clothing. It is for these reasons, for example, that highly qualified mechanics and electricians sent to installing organizations of Borisov's Avtogidrousilitel' plant were idle for a major portion of the time or were occupied with random second-priority work, and their earnings did not exceed 2 rubles per day.

One cannot be reconciled with such instances. Wherever they occur, political information officers are obligated to give them an evaluation of the principles involved, to show what irretrievable material and moral damage such an attitude inflicts on such an important matter, with regard both to the builders and to the collectives that were sent to their assistance.

Especially intolerable right now are defective work, idle time of people and mechanisms because of organizational muddling and irregularity in the provisioning of supplies and equipment, tardiness, absenteeism and other violations of labor and production discipline. As a matter of principle a battle must be waged against each instance, and their pernicious effect on the business of the whole collective must be revealed.

Only 19 calendar days remain before the end of the year. Is it possible to eliminate the lag in such a short time, to achieve unconditional introduction of the facilities? Yes, it is possible--the experience of advanced collectives confirms this. For this purpose it is necessary to organize full-fledged work in two or three shifts at the most critical bottlenecking sections, thereby creating an additional reserve of time to achieve everywhere a sharp growth in labor productivity. The overfulfillment of shift tasks should now become the norm for everyone.

/A day or two ago a communication arrived in the editorial office that reported that the integrated brigade under Yakov Mikhaylovich Koval'kov of Trust No 17 of Lavanstroy had carried out a task of 7 years since the start of the five-year plan. Regardless of how complicated were the conditions under which this brigade worked, it always coped with the task on time and with high quality. What were the secrets of its successes?

"We have no secrets," answers Yakov Mikhaylovich. "It is necessary to take the overall job to heart and to see one's place in it. Then such kind helpers as self-discipline, responsibility and skill will arrive. And it is also necessary to think and for each person to know, as Surorov said, his own maneuver."

These simple precepts were scrupulously observed by Ya. M. Koval'kov's brigade. So violations of labor discipline and defective work were not known here. Each work shift is started without the slightest hesitation--everything necessary has been prepared by the preceding one. The workers have a creative attitude toward every task, even the simplest one, and they try to do it more quickly and better. The equipment operators and drivers know that you do not stand still, you do not take a smoke break with Koval'kov. And was there a case in which the brigade refused concrete or other materials under the pretext that the shift was finishing? Lavanstroy did not recall any. Each matter here was carried on to completion, even if it was necessary to work overtime.

Is this within the capability of others? Yes indeed, the excavator crew of V. Gonchar from Soligorsk Trust No 3, the brigades under Hero of Socialist Labor M. Kupa of Grodno Trust No 30 and S. Gopeyenko of Orsha Trust No 18, bulldozer operator M. Chernyavskiy from Lida Trust No 19, and many others have proved it. All of them have already fulfilled five-year plan tasks./

In revealing the role of socialist competition in raising the pace and quality of operations at startup jobs, politinformators should make known the fact that labor rivalry becomes more active when its results are summed up daily within the brigade, and weekly among brigades, when the most diverse measures of moral and material incentives are widely used. The experience of advanced collectives shows that such an organization of competition, the daily encouragement of the winners, and the disclosure of the laggards will enable labor productivity to be raised 15-20 or more percent without any other kinds of measures. Therefore, prior to the discussion it is necessary to study the organizational practice of

competition within the collective in order to tell the listeners how to increase its effectiveness.

In setting tasks in the construction field during the concluding stage of the year, Candidate Member of the CPSU Central Committee Politburo and First Secretary of the Central Committee of the Communist Party of Belorussia P. M. Masharov emphasized: "In each element of the construction assembly line an atmosphere of active shock work, precise organization, and high discipline and responsibility should be created." At the construction projects today there are no second-priority matters, and therefore each participant of the construction assembly line should toil with all his might. Bringing this thought to the consciousness of the listeners, politinformators should show them their concrete place in the drive to solve this task, which is one of the most important of managerial and political tasks at this time.

In preparing for the discussion, it is recommended that the papers of the November 1979 CPSU Central Committee Plenum and of the republic conference of party, soviet and economic activists that convened on 20 November this year, as well as the article by Secretary of the Central Committee of the Communist Party of Belorussia Yu. B. Kolokov, "During the Concluding Stage," which was published in SOVETSKAYA BELORUSSIYA on 11 November, be studied thoroughly.

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LITHUANIAN CONSTRUCTION INDUSTRY'S PROGRESS, PROBLEMS

Problems Revealed

Vil'nyus SOVETSKAYA LITVA in Russian 21 Dec 79 p 2

[Article by G. Urnyavichyus, inspector for People's Control Committee of the Lithuanian SSR: "Lost Thousands"]

[Text] In 1978 the industrial enterprises of the republic's Ministry of Construction fulfilled their profits plan by only 69.3 percent. Nor has the situation been any better this year. In this regard, the People's Control Committee of the Lithuanian SSR carried out a check on the status of affairs at certain enterprises of the Ministry of Construction.

It must be admitted that the unsatisfactory results of the branch's financial activities are explained to a certain degree by the modernization of enterprises, by increased expenses for deliveries of inert materials and by this past winter's unfavorable climatic conditions. However, the check revealed that non-fulfillment of the profits plan was caused in a number of instances by mismanagement on the part of individual leaders who failed to take proper care of national property, who squandered state resources and who tolerated great unproductive expenditures. Allow me to cite several examples.

At the Klaypeda House-Building Combine (Director I. Lazdauskas), excessive amounts of wages are being paid out annually to the workers, without any justification, for the production of 1 cubic meter of structure made out of precast reinforced concrete. For this reason alone, 66,600 excess rubles were paid out during a period of one and a half years. Instead of undertaking the necessary measures, the Ministry of Construction plans to increase the wage fund for the combine, with a consequent reduction in labor productivity.

Incidents of incorrect use of the wage fund have also been uncovered at the Shyaulyay Plant for Parts for Large Panel Houses (Director P. Vaytkus and Chief Bookkeeper Ya. Shimaytite). In accordance with a request by the

management of the Shyauliyay DSK [house-building combine] (Director V. Valechka and Chief Bookkeeper A. Ivashkyavichyus), the plant in 1978 maintained 23 workers of the combine (designers, architects, drivers of official vehicles, office cleaners and so forth) and will maintain 15 individuals this year, with 43,000 rubles being expended illegally for their wages. The administration of the enterprise has repeatedly raised the question concerning the need for regulating the standard-estimates discipline and yet the situation has not changed. Moreover, in response to a request by the management of this same combine, the plant was obligated, commencing in 1978, to provide 5,600 rubles monthly for the maintenance of the combine. Over a period of one and a half years, these payments amounted to tens of thousands of rubles and this was the principal cause of non-fulfillment by an enterprise of its profit plan.

The check also uncovered serious problems in connection with the accounting for and storage of construction materials. Inventories were often conducted in a formal manner and when finally a shortage was uncovered, it was written off as production expenses and this reduced the amount of profit. Last year, a shortage of inert materials amounting to 41,800 rubles was uncovered at the Klaypeda ZhBK-1 [reinforced concrete structures] plant (Director S. Sheyzhis). Moreover, as is often the case, it was not discovered who the guilty parties were. Instead of undertaking measures aimed at improving the protection of socialist property, the director authorized inert materials to be obtained from other quarries, on an unplanned basis, in order to make up for the shortage. More than 30,000 rubles were expended for the procurement and delivery of these materials. Is it any wonder that a shortage has been uncovered again this year at the plant -- but this time for a total of approximately 50,000 rubles?

At some enterprises of the Ministry of Construction, the number of industrial personnel exceeds the planned number; this also adversely affects the indices for labor productivity and profit. For example, during the second and third quarters of last year the Klaypeda DSK maintained 14 and 50 individuals respectively over and above the plan, with their wages requiring expenditures of approximately 35,000 rubles. A similar situation prevailed this year at the Panevezhis ZhBK and the Klaypeda ZhBK-1 plants.

The leaders of the Shyauliyay Plant for Large Panel House Parts and the Klaypeda DSK are freely employing their resources for the maintenance of the administrative apparatus. Last year the overexpenditure in this regard amounted to many thousands of rubles and this year it is also rather high.

Back in April 1977, in the Mazheykyay Department of the Klaypeda ZhBK-1 plant, a proving ground was built for the production of reinforced concrete and concrete products. But roughly 1 year later, as a result of low labor productivity, the production of these items was terminated. The management of the plant requested the ZhBK trust to temporarily close the proving ground, however the solution for this problem was delayed. The enterprise

was forced to provide 20,000 rubles of amortization deductions for fixed capital which actually had not participated in production. A similar situation prevailed at the Panevezhis ZhBK plant and it resulted in a considerable increase in output production costs.

At some enterprises of the Ministry of Construction, the unproductive expenses and losses caused by substandard production operations are still high. Thus, 24,000 rubles were lost this year at the Klaypeda DSK owing to substandard production and at the Shyauliyay DKD plant -- 21,000 rubles. Last year the unproductive expenses at the second enterprise amounted to 18,000 rubles and during the first 6 months of this year -- already 21,000 rubles. These amounts were mainly concerned with the payment of fines for untimely accounts with the suppliers of materials.

The check revealed that a great deal remains to be desired in the planning of economic indices. For example, last year the profit plan for the Panevezhis ZhBK plant was changed three times, with disruptions taking place in the established schedules and with no change being introduced with regard to the sale of marketable products. The profit plan for the first quarter of this current year has also been changed. This was done on 6 April and, as a result, the plant fulfilled the plan by 113.3 percent (85 percent of the initial plan). The profit plan for the Klaypeda ZhBK-1 plant, for the fourth quarter of 1978, was four times higher than that for the first quarter, despite the fact that the plan for the sale of marketable products increased by only 14 percent.

It also bears mentioning that the technical-economic measures for lowering output production costs and for carrying out the profit plan are being developed at the mentioned enterprises in the absence of proper justification. Nor has strict control been established over the implementation of these measures.

The People's Control Committee for the Lithuanian SSR punishes the guilty parties in a very strict manner. The director of the Klaypeda DSK I. Lazdauskay and the chief bookkeeper S. Gotauchyus were given stern reprimands and monetary fines were imposed upon them for having tolerated serious discrepancies in fulfillment of the profit plan and for having violated financial discipline. A strong reprimand was also handed down to the director of the Shyauliyay DSK, V. Valechka. The republic's people's control committee has requested the management of the Ministry of Construction for the Lithuanian SSR to intensify its control over the work being performed by subordinate enterprises and to undertake the measures required to ensure that state resources are not squandered in the future.

New Management System

Vil'nyus SOVETSKAYA LITVA in Russian 9 Dec 79 p 3

[Article by V. Seybutis, chief of Economic Administration of Ministry of Construction for Lithuanian SSR: "From An Experiment -- To a System"]

[Text] For three years now, the Ministry of Construction for the Lithuanian SSR has been operating under the conditions imposed by an economic experiment -- a test is being carried out on the resumption of management methods. A definite amount of experience has been accumulated at all levels. This experience makes it possible to state that the economic levers placed in operation are exerting a very positive influence with regard to raising the effectiveness of capital investments and construction production operations. The republic's builders welcomed, with a great amount of satisfaction, the decree of the CPSU Central Committee and the USSR Council of Ministers concerning improvements in the economic mechanism. This decree called for a complex of measures to be carried out aimed at accelerating construction work. The principal conditions of the methods tested by us are reflected in the decree. With the commencement of the Eleventh Five-Year Plan, all construction-installation organizations throughout the country will begin working in accordance with the new method.

The conversion over to more improved methods of planning requires a great amount of preparatory work. Prior to testing the managerial methods to be resumed, a number of measures were carried out.

The conversion of contractual organizations over to the new system for planning and economic stimulation was completed in 1976 and the computations for a fully completed project or production capability constituted 96 percent of their overall volume. Large trusts (with annual volumes of 50-60 million rubles) were created in Vil'nyus and Kaunas, which at the present time can be reorganized into construction-installation production installations.

A gradual centralization of administrative functions was carried out at the trusts -- estimates-contractual work, planning, bookkeeping and accounting, supplying construction projects with structures and materials. Thus, conditions were created for concentrating the attention of workers attached to construction administrations on those problems concerned with improving the organization of production. Economic accountability at the lower levels was further strengthened and special attention was focused on the extensive introduction of the brigade contract method. This method is presently being used by 55 percent of the subordinate collectives, responsible for performing 43 percent of the overall volume of construction-installation work. Increased attention was given to the economic training of personnel, especially for specialists and foremen. All of these factors enabled the republic's builders, in the absence of any special difficulties, to test in actual practice the conditions and tasks called for in the economic experiment and to commence management operations on the basis of the new method.

An extremely efficient lever of the planning system called for in the decree handed down by the party and government is the index of marketable construction output. This index is based upon the accounts maintained by contractual organizations with customers, for a completed production

capability or construction project that is capable of producing goods or rendering services. This index of a production plan, which has become one of the principal planning and evaluative indices, and also the new method for providing credit for incomplete production work have enabled our subunits to achieve definite successes. Thus, during the years of work performed under the conditions of the economic experiment, more than 2,500 production capabilities were placed in operation, including 96 items of the national economic plan and Gosplan for the USSR (instead of the 93 called for). Approximately 2.1 million square meters of useful space, or 101 percent of the plan, were introduced into operations and 53 childrens' pre-school institutes (102 percent of the plan) were completed. The plan for marketable construction output was fulfilled by 102 percent.

The introduction into operations of fixed production capabilities and projects was the result of persistent labor being performed by our builders, who focused their principal attention and efforts, under the conditions of the economic experiment, upon completing the projects under construction and fulfilling the plan for marketable construction output.

The index of marketable construction output raises the intensity of production, with the contractual organizations concentrating their principal attention on projects already underway. Labor, material and technical resources are first of all made available for these projects. As a result, the number of projects undergoing construction simultaneously within the ministry was reduced by 12 percent. During the period of work carried out under the conditions of the economic experiment, the average duration of construction work was reduced by 11 percent.

However, considerable alarm has been aroused by the fact that the profitability of the work being performed by the construction organizations has fallen sharply in recent years. The principal reason for this is the growth in wholesale prices for materials, structures and machines, with the estimated prices for construction-installation work remaining unchanged. This problem is quite properly reflected in the resolution of the CPSU Central Committee and the USSR Council of Ministers. The wholesale prices in industry, the estimated prices in capital construction and the rates for freight shipments will be constant throughout the entire five-year plan and this naturally will ensure stable profitability for the work performed by the organizations and enterprises.

But the development and approval of new estimated prices will require 3-4 years. How can this be? Indeed, the profitability of a number of construction organizations is already approaching the zero mark and some are already operating at a loss and this lowers sharply their economic interest in the final results of their work. Thus, it is believed that additional charges should be added on to the existing estimated prices as a temporary measure. Such additional charges would compensate for the increased cost of materials and at the same time they would raise the profitability of the construction organizations to a level that would ensure their operation on a self-supporting basis.

During the course of testing the new economic system, certain shortcomings and deficiencies were noted in the initial variant of the method. They were analyzed as experience was accumulated and methods were defined for achieving further improvements in planning and economic stimulation. We submitted appropriate proposals to the union organizations. Many of these proposals are now reflected in the decree handed down by the party and government. For example: on the need for balancing the plans for capital construction with the material, labor and financial resources and capabilities of the construction-installation organizations; on approving the plans for the customers, in accordance with the volume of marketable construction output, and introducing accounting based upon this index; on establishing an earlier period for the presentation of planning-estimates documentation; on the issuing of orders for the delivery of the principal technological equipment for the entire period of construction; on converting over to planning and computing labor productivity based upon net output and so forth. Many of the factors determined during the course of the experiment will obviously be taken into account in the normative documents being published in connection with distribution of the decree.

The ministry is presently preparing the estimate-normative base for converting over to the planning of labor productivity in construction organizations, based upon conditional-net (normative) output. Commencing in 1980, we plan to work on the basis of this method.

We assume that the method to be employed for stimulating individual subunits of trusts will necessarily be reflected in the normative documents, which are to be published in connection with distribution of the decree. As is known, simultaneous with the construction organizations converting over to the new conditions for planning and economic stimulation, the action of the statute dealing with a socialist state production enterprise was extended to include trusts.

This then is the way in which the economic incentive funds are being formed at the present time. At the same time and for a number of reasons, individual trusts (even in those instances where only a small number of their subunits operate at a loss) are being deprived of the right to form incentive funds. In the process, they are being deprived of the right to issue material incentives to their administration workers who achieved positive results. The ministry cannot aid them in this regard, since owing to a low level of profitability which it was not responsible for, unprofitable work by individual trusts and non-fulfillment by the branch on the whole of the established task for output, no contributions were made to the centralized fund.

It is believed that, under conditions wherein the final value for the economic incentive funds is determined based upon the operational results of the branch on the whole, the republic's Ministry of Construction should be authorized to form these funds at all trusts using the ministry's overall profit and also to extend the method of adding a minimal amount (40 percent of the planned total) of the funds to their centralized portion.

These then are some aspects concerned with the implementation of important measures aimed at improving management in capital construction. A great amount of important work remains to be carried out in the future, during the course of which many shortcomings which are presently retarding construction progress must be eliminated. At the present time, these shortcomings are being studied thoroughly at all levels and specific measures are being outlined for overcoming not only departmental and inter-departmental but also the psychological barriers.

The resolution of the CPSU Central Committee and the USSR Council of Ministers on improving planning and strengthening the effect of the economic mechanism, with regard to raising production efficiency and the quality of work, serves as a summary of the great production experience accumulated by economic organizations and enterprises throughout the country. The introduction of the statutes of this resolution into operations in all areas, statutes which were checked by us in actual practice, will provide a powerful economic stimulus for reliably promoting fulfillment of the planned tasks for the Eleventh Five-Year Plan.

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CONSTRUCTION

PLANS FOR OVERALL DEVELOPMENT OF MOSCOW IN 1980 UNVEILED

Moscow STROITEL'STVO I ARKHITEKTURA MOSKVY in Russian No 1, Jan 80 pp 2-4

[Article by N. Trofimov, First Deputy Chairman of the Mossovet Ispolkom: "Moscow 1980"]

[Text] During the four years of the five-year plan the volume of industrial production for the city increased by 17%. Four million square meters of industrial-production floor space were put into operation. The output of goods and articles of the highest quality increased by a factor of 2 to 3. Construction workers put housing units into use with a total area of 17.7 million square meters. Eighty-two new schools, and hospitals with accommodations for 7,240 were put into service.

The total volume of capital investments for Moscow during 1980 is fixed at 3,701.6 million rubles including more than 2 billion rubles for the development of the urban economy. It is planned that housing units with a total area of 4 million square meters are to be built. Almost half of all the new housing units built during the current year will be 16 stories or more. In all, 2,683,000 square meters of living space will undergo planned preventive maintenance. The total extent of subway lines by the end of the five-year plan will reach 185.1 kilometers and the number of stations will be 115. The capacity of the telephone system will increase to 2,700,000 exchanges--35 for each 100 persons. One hundred and five kilometers of water mains and pipes will be laid. One hundred and sixteen more stores and 140 more public-eating establishments will be opened.

Working collectives of the capital, having developed socialist competition to put the program for economic and social growth into practice

that was adopted by the 25th CPSU Congress, are successfully accomplishing the goals of the 10th Five-Year Plan and are consequently executing measures to transform Moscow into a model communist city.

The new flow of creative energy is due to the decisions of the November (1979) Plenum of the CPSU Central Committee and the position and conclusions contained in the speech by General Secretary of the CPSU Central Committee and Chairman of the Presidium of the USSR Supreme Soviet Comrade L. I. Brezhnev.

During the past four years of the five-year plan the volume of industrial production for the city grew by 17 percent as opposed to 13.9 percent in the plan. The quotas for turning out the majority of important types of products were met.

Output at Moscow municipal ispolkom industrial enterprises will be higher than the plan for electrical apparatus, aluminum building structures, technological equipment used in the production of reinforced concrete structures, and bakery hardware.

Measures are being implemented to re-equip Moscow industries with technology, to introduce automated systems and the scientific organization of labor and to put new types of machinery, equipment, apparatus, and devices into production. The production of goods and articles of the highest quality increased by a factor of 2.3.

All sectors of the urban economy achieved further growth. Consequently, the social program of the five-year plan is being realized.

Moscow construction workers have put housing units into use with a total area of 17.7 million square meters. This has made it possible to improve living conditions for 1.7 million people.

The fast pace of housing construction is accompanied by an improvement in the architectural, planning and utilization features of housing units and by an increase in the volume of construction based on new designs that use the standard hardware in the General Catalogue and which have more stories.

Eighty-two schools and preschool institutions were built that can accommodate 71,200 children, as well as hospitals with 7,240 beds and 52 polyclinics that can accommodate 41,500 people.

The material-technical base of trade enterprises and public-eating establishments was strengthened. More than a thousand new stores, cafes, restaurants, and cafeterias opened, including 109 that are in schools or are school based. Capacities for preserving 199,500 tons of fruit and vegetable produce were put into use.

Transportation services for the population were improved. The Rizhskiy and Kalininskiy radial subways were put into service. In all, 140.8 kilometers of trolleybus and 9.8 kilometers of streetcar lines were built or reconstructed.

Industrial construction is being carried out on a large scale. During the 4 years of the five-year plan 4 million square meters of construction production floor space were constructed and 225 important production capacities were put into use, including those at "B" group enterprises.

A large volume of work is being done at Olympiad-80 sites.

Together with this there are a number of deficiencies and omissions in construction production lines. The principal criticisms were justifiably aimed at Moscow construction organizations during the plenum of the party's Moscow Municipal Committee, which discussed the results of the November (1979) Plenum of the CPSU Central Committee and the tasks set for the municipal party organization as a result of the decisions of the Plenum and the speech made by General Secretary of the CPSU Central Committee and Chairman of the Presidium of the USSR Supreme Soviet comrade L. I. Brezhnev.

During his report at the plenum of the CPSU MGK [Moscow Municipal Committee] V. V. Grishin, First Secretary of the party's Moscow Municipal Committee, noted that due to a number of reasons municipal construction organizations did not meet the goals of the five-year plan and that every year capital investments were not being completely assimilated. Construction delays were allowed for structures that are to be used for public health services, trade, public-eating establishments, and communal-everyday services.

Capital investments continue to dissipate for many structures which leads to an increased length of time to construct them; the volume of incompleting construction is being reduced slowly. Improved engineering preparations are not being provided for territories under construction and for complex buildings in microrayons; problems relating to an improvement in the quality of construction are not being solved.

All of this requires persistent work in the pursuit of improvement for this important industry, increased responsibility on the part of directors of construction central boards and consolidation of control over implementing the measures taken by the CPSU MGK and the Mossovet ispolkom which are aimed at improving efficiency and quality in construction-assembly work.

Implementing the program for the concluding year of the 10th Five-Year Plan is an important step for the further development of capital

construction. As is well known the plan for the complex economic and social development of Moscow during 1980 was reviewed and ratified during the 12th session of the 16th convocation of the Moscow municipal soviet of people's deputies. The plan was worked out in complete accordance with the goals of the State Plans for Economic and Social Development and the USSR and RSFSR state budgets for 1980 which were derived from the scheduled figures and indices contained in the five-year plan and from the principal aims of the General Plan for the Development of Moscow. In it measures are specified for realizing the CPSU Central Committee and USSR Soviet of Ministers Decree "Concerning an Improvement in Planning and Increasing the Influence of the Economic Mechanism to Improve Production Efficiency and the Quality of Work" and also the decrees of the CPSU MGK bureau and plenums and the decisions made by the Moscow soviet related to the problems of developing sectors of the national economy in the city, improving the level of the production-utilization activities of organizations and services in the urban economy and improving services for the population.

An important goal of the plan is to improve the organization of construction production by means of concentrating capital investments and material-technical resources at starting sites and structures, further expanding efforts to re-equip and reconstruct operating enterprises with technology, decreasing the volume of incompleted construction, the amount of nonstandard equipment and the duration of construction, strengthening and expanding the material-technical base of construction organizations and building up their production capacities.

The plan for capital construction during 1980 specifies measures that are aimed at meeting the goals of the 10th Five-Year Plan for the development of industry, transportation, communications and the urban economy as a whole and at completing all work connected with construction and reconstruction of Olympic sites and with preparing the city to conduct the Olympic Games.

Additional measures are outlined for providing new rayons of the city with complex buildings. Realization of the construction plans for Birbirev, Yasenev, Otradniy and Orekhovo-Borisov will make it possible to more fully satisfy the needs of the population in these rayons for trade and cultural-everyday service enterprises and public-eating establishments.

Measures are specified for the reconstruction of older existing sections of the city and for increasing the level of service in the center of the capital.

The total volume of capital investments for Moscow in 1980 is fixed at 3701.6 million rubles, including more than 2 billion rubles for the development of the urban economy.

With the aim of accelerating the length of time it takes to put production capacities and structures that are under construction into operation the volume of capital investments for these buildings will be increased from 65.4 percent in 1979 to 68 percent in 1980. The specific proportion of capital investments that will be earmarked for starting structures in the Moscow ispolkom economy is higher than for Moscow as a whole and comprises more than 70 percent.

The number of sites that are simultaneously under construction was reduced to 326 in comparison with last year and the number of sites where new construction will begin was reduced to 247.

During the present year contract construction-assembly and maintenance-construction organizations in Moscow are faced with a total volume of 3,372.5 million rubles worth of work, including 3,104.3 million rubles worth of work to be done by their own labor forces which in comparison with 1979, comprises 104.3 percent of the total volume of work and 104.4 percent of the work completed by their own labor forces.

One of the important problems which construction workers must solve is the timely completion of all work at Olympic sites. At the same time construction, reconstruction and improvements for main thoroughfares, streets and territories adjacent to the Olympiad-80 sites and construction and repair of hotels, student dormitories, restaurants, cafeterias, and cafes for tourists who will be arriving in Moscow for the Games remains to be fully completed.

During the concluding year of the five-year plan a broad program for the further development of all sectors of the national economy in Moscow remains to be implemented.

Significant funds will be directed towards the technological re-equipment and reconstruction of industrial enterprises. Reconstruction and expansion is scheduled for chemical, oil refining, motor vehicle and bearing plants, electrotechnical machine tool industries, ferrous metallurgy plants, and in particular such structures as the Moscow oil-refining plant, "Serp i molot," "Krasnyy proletariy," imeni Sergo Ordzhonikidze, machine tool assemblies and automated systems and "Kalibr." Enterprises in food, meat and milk and light industries will experience renewed life.

As before, the pace of housing construction is fast. It is planned that 4 million square meters of total floor space will be built and put into use. The quality of dwellings will improve due to an increase in the volume of construction based on new designs that use standard hardware from the General Catalogue and due to an improvement in existing designs. Thus, hardware from the General Catalogue is to be used in constructing housing units with a total

area of 2,152,000 square meters or 53.8 percent of the total that will be put into use.

In addition to the single section tower type housing units of series P-43/16, production and construction of 16-story multi-section housing units of series P-44/16 will begin at Glavmosstroy DSK No 1 [Housing Construction Combine]. DSK-3 will begin production of new housing units with an increased number of stories.

The output of 12-story housing units of series P30-31 and P46-47 will increase at Main Moscow Industrial Construction Materials enterprises.

The specific proportion of construction for housing units with an increased number of stories will increase for Moscow as a whole. The volume of construction for housing units with 16 or more stories will comprise 1,940,000 square meters in 1980 or 48.5 percent of the total that will be put into use.

An increase in the volume of capital investments for setting up anticipatory work is specified in the plan. According to limits set by the Moscow municipal ispolkom it will comprise more than 34 percent.

In all a total of 764 million rubles will be earmarked for housing construction this year as opposed to 752 million rubles in 1979.

The total floor space of the dwellings that will be put into use will be distributed as follows:

- 1,510,000 square meters in rayons where construction was begun in previous years;
- 1,760,000 square meters in new territories;
- for existing older sections of the city--520,000 square meters inside the Maloye ring formed by the Moscow railroad;
- 40,000 square meters in Zelenograd;
- 170,000 square meters outside of Moscow (for industrial enterprises, quarries, automated industries, resort hotels, and other administrations, main administrations and divisions under the Moscow municipal ispolkom).

In addition, repairs and improvements for the housing fund will be done on a large scale. In all, dwellings with an area of 2,683,000 square meters (400,000 square meters more than were renovated in 1975) are scheduled for planned preventive maintenance. Remodeling of existing apartments is scheduled for housing units with 82,200 square meters of living space in order to remake them into single family dwellings.

By the end of 1980 99.6 percent of the dwellings in the urban housing fund will be provided with water and sewerage, 95.5 percent with bathrooms, 85 percent with hot water, 82.5 percent with gas, and 17 percent with electric ranges.

Much attention was given to developing all types of transportation.

Construction of the Serpukhov radial subway continued from "Dobrynin" station to "Dnepropetrovsk" station with a total length of 13.86 kilometers, and construction also continued on the Zamoskvorets radial subway from "Kashir" station to "Brateyevo" station with a total length of 9.8 kilometers. The Shabolov station will be put into service this year.

The total length of subway lines by the end of the five-year plan will comprise 185.1 kilometers with 115 stations (as against 164.5 kilometers and 103 stations at the beginning of the five-year plan).

Measures for improving above-ground transportation services for the population have been stipulated. Construction of the starting complex at the bus depot on Volokolam highway, the trolleybus depot on the Elektrolit thoroughfare and the taxi depot in Biryulev which holds 1,100 taxis are scheduled to be completed, as well as 24 kilometers of trolleybus lines. Three hundred and fifty covered waiting areas at public transportation bus stops will be erected.

The material-technical base for the Main Moscow Motor Vehicle Transportation Directorate will be strengthened. The plan for the year includes completion of construction for a branch of motor vehicle combine No 1 in Beskudnikov, a truck station in Zagorsk, six filling stations and the starting complex at the Sverdlovsk rayon motor vehicle depot.

New communication structures will appear on the map of the city. Completion of construction is scheduled for nine ATS [Automatic Telephone Exchange] buildings and for their equipment to be serviced, principally in rayons where a large amount of construction is going on. This will make it possible to increase the capacity of the Moscow municipal telephone system in 1980 (while taking into consideration dismantling of outdated equipment) by 107,000 telephones in comparison with 1979. By the end of the year the total capacity will reach 2,700,000 telephone exchanges.

Full telephone service is scheduled to be instituted in the Chertanovo and Veshnyaki-Vladychino rayons and telephone service is to be improved for Lyublinsk, Voroshilovsk, Timiryazevsk and other administrative rayons of the capital.

The average number of telephones will comprise 35 per 100 residents or 29.6 percent higher than the density in 1975. The level of telephone service for the city will comprise one telephone per 1.3 apartments. This is somewhat higher than what was specified by the five-year plan.

In addition, Olympic structures will be put in use: a "Telex" intercity telephone exchange, an automated intercity telegraph exchange with six communication channels, an intercity post office as well as a post office at Pavelets station.

Important significance is attached to the urban water and sewerage system.

Work is continuing on the hydrotechnical system imeni the 60th Anniversary of the October Revolution. Basically it is related to improvements in hydroelectric stations and new settlements, construction of industrial bases, dispatcher stations and engineering communications.

The plan for the current year includes reconstruction of the Rublevo waterworks, the start of operations for the first complex at the Orekhovo-Borisov pumping station with a capacity of 100,000 cubic meters daily, construction of the second phase of the Kuz'min water main regulating terminal, intended to improve the water system for the Perovski and Volgogradskiy rayons and the microrayons attached to them, and the first phase of water mains with a length of 15 kilometers for the Kyntsev industrial water system.

In order to supply water to rayons with new construction 105 kilometers of water mains and pipes, 49 kilometers of sewerage canals, collectors and pipes will be laid.

Construction of new roads, overpasses, bridges, transportation buildings, underground pedestrian passageways, sludge deposit reservoirs, underground communication receivers and improvements in urban areas are planned for the highway and bridge industry.

Railroad crossings at different levels are scheduled to be completed and put into service for the Kashira-Rublevo main highway where it intersects with the Moscow railroad in the direction of Kiev as well as a crossing for a section of the Kashira-Rublevo main highway from the approach to the overpass to Lobachevskaya Street, which will make it possible to provide transportation links between the Olympic village and the zones where the sports structures are located in Krylat.

Construction of a bridge over the Moscow River in Shchukino-Strogino is continuing as well as an intercity circumferential main highway from the street on the Sokol'nicheskii embankment to Bakunin Street which includes construction of a railroad crossing at the Mit'kov railroad siding and bridges over Rusakov Street and Moscow railroad lines in the direction of Ryazanovsk, an overpass where Ryzanskiy Avenue meets the Boynya-Perovo railroad siding, stopping places along the MKAD [Moscow Circumferential Highway] and an overpass where the MKAD meets the Nosovikhin highway.

With the aim of further developing the energy base for the city and improving the fuel resources balance structure work is planned for developing a central heating system and improving the reliability and evenness of gas heat and electric supplies.

In conjunction with the distribution of construction for housing and cultural-everyday services it is projected that capacities at thermal power plants in Strogino and Fily with a rate of 240 thermal units per hour will be put into operation, new gas mains will be built and worn out ones replaced that together have a total length of 35 kilometers, and 45 kilometers of heating pipes will be put into service.

Heating systems will be laid basically in rayons where new housing construction has taken place: Strogino, Businovo, the Filev flood plain, Kuntsevo, Nagatino, and Mar'ino.

In addition, work is being done to increase output at Moscow TETs No 23 and 25.

Development of the thermal power base which is planned will make it possible to improve the thermal resources balance structure for the city and to bring the portion of centralized sources of heat up to 83 percent by 1981 as against 77 percent in 1976. The portion of gas in the thermal resources balance will reach 66.5 percent by 1981 as against 64.5 percent at the beginning of 1976.

A large number of trade and public-eating establishments will open during the current year to serve Moscow residents and guests in the capital.

It is planned that 116 stores and 140 public-eating establishments with 29,000 seats will be put into service.

Included among the trade enterprises and public-eating establishments are the self-service stores in Yasenev, Kuntev, Otradniy, Zelenograd, Strogino, and Mar'ino, the school-based cafeterias in Chertanovo-Annina and on Khutorskaya Street, and the "Praga" store in Chertanovo-Annina.

In conjunction with the tasks set by the bureau of the CPSU MGK and the Mossovet ispolkom, the high volume of construction which has been taking place for food and vegetable storehouses will be maintained in 1980. Storehouses with a total capacity of 57,000 tons are scheduled to be put into use.

Measures have been specified which are aimed at further developing domestic services. A combined enterprise for quick service dry cleaning and laundering with a capacity of 1,065 kilograms per shift is scheduled to be put into service in the Perov rayon, as well as

9 public service combines and tailors with 86 working places in the Timiryazev rayon which have been built by a mandate of the voters. In addition 165 everyday service enterprises are opening on the first floor of housing units.

A subject of special concern, as before, is the further development of the school and preschool system. Construction is planned to be completed for 19 school buildings with 20,000 seats including 3 each in the Voroshilov rayon (Strogino), the Timiryazev rayon (Vostochnoye Degumino-2 and Lianozovo), two schools each in the Kirov, Sovet and Lyublin (Mar'ino) rayons, and one each in the Cheremushkin, Babushkin, Kuybyshev, and Krasnopresnen rayons. Construction of schools based on new designs (with 30 classrooms and 1,176 seats) will continue in Strogino, Otradniy, Volkonka-ZIL, and Yseney.

In 1980 new hospitals and polyclinics will open specifically the multi-section hospital with 1,200 beds in Veshnyaki-Vladychin, the first aid medical clinic on the grounds of the Institute imeni Sklifosovskiy and therapeutic medical buildings on the grounds of hospital No 59 in the Sverdlovsk rayon and hospital No 33 in the Sokol'nich rayon.

By means of free communist Saturday labor a maternity hospital with 320 beds and a children's ward with 120 beds on the grounds of hospital No 20 in the Babushkin rayon are scheduled to be put into service. Construction will continue for the children's clinical hospital with 1,000 beds in Brattsev and the All-Union cardiological center and construction will begin for the maternity hospital with 150 beds in Vikhin in the Volgograd rayon.

In order to improve dispensary and polyclinic services for the population 17 polyclinics which can accommodate 8,900 people are scheduled to be put into operation. Among them are two polyclinics for children in the Voroshilov rayon which can each accommodate 320 people, a polyclinic for adults and one for children in the Kirov rayon, polyclinics for children and adults in the Cheremushkin rayon and a number of other rayons in the city.

The plan for the year includes continuation of efforts to strengthen the material-technical base of cultural buildings; a number of parks in the city will be renovated, among them the TsPKiO [Central Park of Culture and Relaxation] imeni Gor'kiy, Izmaylovo, Kuskovo and the Kolomenskoye museum-preserve.

Reconstruction of the MKhAT [expansion unknown] building imeni Gor'kiy and the architectural ensemble in Tsaripyn, construction of the state portrait gallery and reconstruction and expansion of the "Mosfil'm" motion picture studio will continue.

The plan for 1980 is on a tight schedule but it is realistic. All the means are available to fulfill it. Each day competition is expanding in Moscow labor collectives to suitably greet the 110th anniversary of the birth of V. I. Lenin.

An election campaign is currently taking place to choose members of the RSFSR Supreme Soviet and local soviets of people's deputies with the slogan of increased labor and political activity. Moscow residents are determined to make 1980 a year of fast-paced work following Lenin's example. There is no doubt that under the guidance of the municipal party organization workers will strive for new labor achievements in all areas of communist construction.

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CONSTRUCTION

RSFSR HOUSING MINISTER DETAILS GROWTH

Moscow ZHILISHCHNOYE I KOMMUNAL'NOYE KHOZYAYSTVO in Russian No 1, Jan 80
pp 4-6

[Article by S. M. Butusov, RSFSR Minister of Housing and Municipal Services: "Up to the Level of Present-Day Requirements"]

[Text] The positions and conclusions which were set forth in the speech of the General Secretary of our party's Central Committee, the Chairman of the Presidium of the USSR Supreme Soviet, Comrade Leonid Il'ich Brezhnev, at the November 1979 Plenary Session of the CPSU Central Committee, as well as the decisions taken by the Plenary Session and the Second Session of the USSR Supreme Soviet, 10th Convocation, have aroused in us, workers in the field of housing and municipal services, feelings of lofty duty and responsibility for carrying out the plans for 1980 and those for the five-year plan as a whole.

Our party is following a well-organized plan in carrying out a course of solving the most important social problems and raising the Soviet people's standard of living. And this is particularly notable as seen in the example of the dynamic growth of the Russian Federation's housing and municipal services.

In the current five-year plan alone the RSFSR's available housing is being increased by 22 percent. Thanks to the active aid of local Soviets, more than two billion rubles a year are being expended in the construction of municipal-service projects; this is in addition to the funds which have been earmarked for civic improvements.

The high growth rate of housing and municipal services, both in the cities and in the rural localities, has sharply posed for the ministry the problem of significantly improving the quality of its technical operation, especially under winter conditions.

This article was prepared on the basis of a speech delivered at the 11th Session of the RSFSR Supreme Soviet, Ninth Convocation.

The total volume of repair and construction operations under the ministry's jurisdiction has amounted to 2.5 billion rubles, while that of municipal services has come to 8 billion rubles. The level of public services and amenities for socialized available housing amounts to 87 percent, while the installation of gas facilities for apartments is at 74 percent, including 76 percent in the Non-Chernozem Zone.

Fulfillment is assured of the plans established year by year of the five-year plan for municipal-everyday public services, capital repair and maintenance of the local Soviets' available housing, civic improvements of populated places, and sales of the industrial output by the ministry's republic-level enterprises.

The plan for four years of the 10th Five-Year Plan has been fulfilled ahead of schedule by groups of enterprises and organizations of housing and municipal services of the Smolenskaya, Vladimirskaia, and Novosibirskaya Oblasts, the Krasnodarskiy Kray, and others.

On the whole throughout the system of the RSFSR Ministry of Housing and Municipal Services during this period services provided to the public amounted to 420 million rubles above the plan.

Groups at the Russian Federation's housing and municipal-services enterprises are successfully struggling to fulfill and overfulfill their personal plans and socialist obligations (pledges), aimed at further increasing production efficiency, as well as improving the quality of operations and services to the public.

In the 10th Five-Year Plan about 700,000 persons have taken part in the competition for the title "Shock Worker of Communist Labor." This meritorious title has been awarded to more than 400,000 workers.

The labor done by municipal-services workers is finding more and more public recognition.

For their self-sacrificing labor the meritorious title of "Honored Worker in the Field of Housing and Municipal Services of the RSFSR" has been won by 184 persons. These are specialists in gas, water, and sewer services, municipal electric transport, repair and construction organizations, power services, public services and amenities, landscaping, municipal services, and workers at the Oblast and Kray administrations of municipal services.

Among them the following five persons have been awarded the Order of Lenin: brigade-leader of the plasterers and painters of the RSU (Repair and Construction Administration) of the Production Housing and Repair Association of Moscow's Oktyabr'skiy Rayon, Nikolay Ivanovich Korchikov, the asphalt-concrete worker of the road-building administration of the civic improvement trust of the Sochi gorispolkom, Sarkis Avanesovich Guliyan, the brigade-leader of the carpenters of the Production Administration of the Water

Supply and Sewer Services of the Kuybyshev Gorispolkom, Nikolay Fedorovich Barchenko, the streetcar-conductors--of the TTU (Streetcar and Trolleybus Administration) of the Saratov Gorispolkom, Anna Tarasovna Necueva, and of the Lipetsk TTU, Anastasiya Ivanovna Tikhonova.

The meritorious title of "Honored Builder of the RSFSR" has been won by 130 persons, and that of "Honored Power Worker of the RSFSR" by 19.

The successes which have been achieved in the work of the Russian Federation's Housing and Municipal Services have been considerable. But much remains to be done in the concluding year of the 10th Five-Year Plan.

We are not satisfied with the results achieved, because they have still not attained steady work for our enterprises and organizations, or the effective utilization of labor, material, fuel and energy resources. This is particularly true with regard to the work of the housing and municipal services in rural localities.

Production administrations of housing and municipal services for rural regions are still being created too slowly on the basis of combines of municipal-services enterprises. This work must be completed during 1980. The RSFSR Ministry of Agriculture must activate the creation of municipal services in sovkhozes and kolkhozes, as provided for by the joint orders of our ministries.

Municipal-services workers have already adapted for operation one-fourth of all the apartments converted to gas in the rural areas. Jointly with the RSFSR Ministry of Agriculture, this work must be completed in 1980. We will also extend further aid to rural workers in solving the problems of providing public services and amenities to the villages, water supply and sewers by means of introducing "Struya"-type units for producing drinking water and compact units for purifying waste waters. The growth rate of housing and municipal services has continued to lag behind the development of populated places. This pertains especially to the introduction of new capacities into operation. For example, the contracting organizations of the Ministry of Construction and the Ministry of Industrial Construction over the course of several years have not introduced into operation purification facilities in Novosibirsk, Bryansk, Perm', and other cities. A similar position has also taken shape with the turnover of production facilities of municipal electric transport and enterprises providing municipal services, where there are as many as 200 "long-term construction projects."

The quality of the technical operation of facilities and the standards of providing services to the public have been adversely affected by shortcomings in construction planning and organization. For example, less than 30 percent of the new housing has been accepted with marks of "good" or "excellent." As a result more than five or six times as much in funds is being spent on the repair and technical operation of apartment houses than are provided by the norms. This, in turn, requires an extra-plan diversion of

the efforts and material resources of repair and construction organizations to the detriment of the planned preventive maintenance of the housing stock and municipal-services facilities. This occurs because the introduction of housing at the end of the year amounts to almost half the annual plan. The acceptance of houses under such conditions takes place without the necessary strict requirements on the part of the local organs of architectural-construction control and housing services. A great deal here depends not only on the construction ministries, whose work was subjected to justifiable criticism at the November 1979 Plenary Session of the CPSU Central Committee, but also on the clients, who in many cities have still not banded together into one service and do not have centralized technical guidance.

In fulfillment of the decrees of the USSR Council of Ministers and the RSFSR Council of Ministers which were adopted last year, the basic indicators of the operation and repair of the housing stock were included in the State Plan for the economic and social development of the RSFSR for 1980. Up to now, however, they have not been supported by material and technical resources in accordance with the norms worked out by the ministry; these have still not been reviewed by USSR Gosplan and Gosstroy. It is extremely necessary to speed up the solution of this problem.

It is obvious that RSFSR Gosplan will have to return once more to an examination of the problem of plan indicators for the production and operational activities of all sectors of housing and municipal services for the 11th Five-Year Plan in the light of the decrees passed by the CPSU Central Committee and the USSR Council of Ministers with regard to improving the economic mechanism.

The efficient utilization of and economies made in fuel and energy resources, as one of the fundamental problems on which Leonid Il'ich Brezhnev dwelt at the November 1979 Plenary Session of the CPSU Central Committee, is of particular importance for housing and municipal services.

The further raising of standards for the public services and amenities of apartments has increased gas's share in the fuel balance for communal-everyday needs to 60 percent, where the expenditure of electric power per inhabitant has grown to 1000 kW-hrs annually.

A savings of just one percent of the energy expended in our economy annually is equal to a savings of 130,000 tons of conventional fuel.

The work which is being carried out by the ministry and by the local Soviets of People's Deputies has allowed us to ensure the fulfillment of tasks regarding the observance and lowering of norms for the expenditure of fuel, heat, and electric power; however, the tasks with regard to further savings in fuel and energy resources are not being fulfilled.

It is impossible to remain silent about the serious shortcomings which are hindering the further increase of efficiency in this great work. During recent years there has been a weakening in the attention paid by the Ministry of Power and Electrification, RSFSR Gosplan, our ministry, and the local Soviet organs to the development of a centralized heat supply service to the cities. If the annual growth rate of centralized heating of apartment houses and public buildings previously amounted to as much as 5 percent, it now has decreased to 1 percent. This has led to the creation of as many as 500 new, small-scale boiler plants per year, which is double the number of those being closed down.

The USSR Ministry of Power and Electrification and RSFSR Gosplan ought to increase, within the total volume of construction, the proportion of funds and materials allocated to the development of mainline heating networks.

Because of a lack of instruments for keeping track of heat energy, gas, and other energy resources, apartment houses are put into operation without the means of control and regulation. Moreover, calculations have shown that merely as a result of supplying heating systems with regulating fixtures, annual savings of as much as 10 percent of fuel could be made.

The Ministry of Chemical and Petroleum Machine Building must speed up the putting into operation of the plant for producing heating fixtures in the city of Bologoye; it was supposed to have been put into operation as far back as 1975.

This also holds true for the Ministry of Instrument Making, Automation Equipment, and Control Systems in its section devoted to assilating serial production of instruments for keeping track of the expenditures of heat energy as well as the means for automating heating systems.

We are not divesting ourselves of the responsibility for solving this problem, nor for preparing the housing and municipal services for winter, but it is obvious that USSR Gosplan must be more persistent in demanding the fulfillment of the tasks established by the Union ministries and departments.

The speed-up of scientific and technical progress in housing and municipal services and the improvement in administrative methods have facilitated the fact that the growth rate in the volumes of operations and services during the 10th Five-Year Plan has outstripped the growth rate for the number of workers twice over (the growth was 139.7 percent and 119.4 percent respectively). Nevertheless, the level of labor mechanization in our economy continues to remain low--at a level of 49 percent. Taking this into consideration, the RSFSR Ministry of Housing and Municipal Services prepared proposals with regard to expanding the output and improving the quality of machines and equipment for housing and municipal services at enterprises under the Ministry of Construction, Road and Municipal Machine Building. These proposals were pre-coordinated with the above-mentioned ministry, but so far

they have not been put into practice.

Serious alarm has been caused by the delays in the production of municipal-services equipment, new materials, instruments, and chemical reagents at enterprises of the Ministry of the Chemical Industry, the Ministry of Ferrous Metallurgy, and others. The USSR Gosplan must strengthen its control over the execution of the tasks assigned by it.

The RSFSR Ministry of Housing and Municipal Services in conjunction with the USSR Gosplan worked out a plan of measures to increase the output of machinery and equipment for comprehensive mechanization in housing services. In connection with the short supply of material means and complete sets of auto chassis, our requirements for repair, operational, and breakdown machinery are only being met to the extent of one-third. The ministry's industry could have increased the production of municipal-services equipment. And it is necessary to utilize this reserve.

The lessons of last winter, when heat and electricity were in short supply in a number of cities, has compelled us and the local Soviets of People's Deputies to pay closer attention to preparing housing and municipal services for this winter.

Thanks to the constant attention to this important and responsible matter on the part of the RSFSR Council of Ministers, oblast, city, and rayon party committees, as well as the ispolkoms (executive committees) of the local Soviets, this preparation proceeded in a more organized manner than in past years.

Nevertheless, check-ups have shown that in a number of places sufficient measures were not undertaken for the on-schedule completion of the entire complex of pre-winter operations, and this has caused justifiable complaints from the public. The ministry and the local Soviet organs are adopting operational measures to eliminate the shortcomings which have been revealed.

During the course of preparing for the 11th Session of the RSFSR Supreme Soviet, Ninth Convocation, the deputies of the RSFSR Supreme Soviet--members of the commissions on budgetary planning and housing and municipal services as well as civic improvements--thoroughly analyzed the activities of the ministry and its organs with regard to fulfilling the tasks for 1979; they expressed justifiable criticism aimed at us for omissions in the work of the repair and construction organizations, municipal electric transport, and other sectors. The notes and recommendations made by the deputies will be fully taken into consideration by the ministry in the plan for the organizational and technical measures for 1980.

The indicators which have been adopted in the plan ensure the further development of housing and municipal services as well as an increase in the volume of operations and services during the 10th Five-Year Plan by a

factor of 1.4.

The workers of the Russian Federation's housing and municipal services must adopt all necessary measures to fulfill with honor the plan tasks for 1980, to concentrate all efforts and the creative quest to disclose and utilize production reserves, to increase the efficiency and quality of the work in full accord with the decree of the November 1979 Plenary Session of the CPSU Central Committee, the decisions made by the sessions of the USSR Supreme Soviet and the RSFSR Supreme Soviet. We must develop more broadly socialist competition for a worthy greeting to the 110th anniversary of V. I. Lenin's birth and for the successful completion of the 10th Five-Year Plan.

Happy New Year, Dear Comrades! Let it become for each one of you a year of outstanding Leninist labor!

Onwards to new labor achievements!

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CONSTRUCTION

FINISHING TOUCHES BEING PUT ON MOSCOW'S OLYMPIC VILLAGE

Moscow ZHILISHCHNOYE I KOMMUNAL'NOYE KHOZYAYSTVO in Russian No 1, Jan 80
pp 20-22

[Article by S. V. Fedorova, correspondent: "No. 1 is Ready"]

[Text] It is 1980 on the calendar. Within half a year the Olympic Village will fling wide its doors hospitably to guests from all countries and continents; foreign languages will fill its streets. But already today, right now, this unusual village, which we designate as such only by tradition, has become the most famous one in the world.

There is an extensive square onto which everyone emerges after passing through the principal entrance from Michurinsk Prospect. The first thing that you see--two buildings stretching along the Prospect--is the administrative and cultural center. From here roads lead out to every part of this city within a city, excuse me, village. From the right-hand side there is a pedestrian alley, leading to the apartment houses. From the left are two squares, ornamented with fountains and sculptures. And further on you see soccer fields and the mirror-like surface of a body of water.

The Olympic Village grew up entirely within two years. It occupies 107 hectares and consists of several complexes: sports, cultural, and residential. This last is represented by 18 apartment houses, each with 16 stories. By November 1979 the builders had finished their work. They installed the heat, electric, and sewer systems.

The length of the communications amounts to 1600 km. Ready to service the engineering facilities are almost 3,000 persons who have passed a course on special programs.

The heart of all the technical services is the united dispatching office. Its installation was completed some time ago. From here one can monitor whether each section and all the equipment are operating normally. In June, when the confluence of the Village's temporary inhabitants begins, the entire system will go into operation. Various types of information will flow into the dispatching office; signals concerning the opening of

the entrance doors of the technical-service basement, from the electric shield area, the lofts, and the machine section of the elevators. A special signal system will let us know in time about the occurrence of a fire or even a failure of the fire-alarm signals in the residential section. Everything is arranged so that, without leaving the dispatching office, using remote control, one can turn on or off lights in the entranceway overhangs, in the vestibules, corridors, on the stairway landings, or in the elevator halls.

The central heating point also communicates to the dispatcher concerning the condition of the pump units and the parameters of the heat-transfer agents. The dispatcher can be linked up to the heating point at all times. One glance is sufficient to ascertain the pressure and temperature in any section of the water- or heat-supply system.

The elevators are also ready for loads. There are no more nor less than 108 elevators in the residential zone. They all have the same, augmented load-hoisting capacity--not the usual 320 kg, but 400. These are the passenger elevators. The freight elevators, moreover, are capable of lifting 800 kg to the top floor at a speed of one meter per second.

Important additions were made to the manual of the Village, this complex group of diverse engineering apparatus and systems by A. I. Khitrov, Senior Engineer of the Olympic Village Administration. Located here are 36 facilities with a total area of 381,000 sq. meters. The extent of the communications comes to almost 1500 km.

"I would call our service invisible, so to speak, an omnipotent invisibility. For on it will depend the comfort of those living in each apartment house, in each room. From the very first day of the new year of 1980 we proclaimed the readiness of No. 1 and began to "let play" the operation of all the technical services."

The Olympic Village also has its own cooling center. To be sure, the Moscow climate does not require air conditioners in the residential areas; therefore, the "masters of cold" have taken under their care the cultural and trade centers, the restaurants, and dining-rooms. There will always be a specified temperature and humidity in their areas.

Well, let's enter through one of the building entrance-ways. Let's take a look into a few of the 3500 apartments which have been designated for the Olympians. First of all, let us state that the apartments have two or three rooms each. They have been fitted out with comfortable furniture. Two persons will be living in each room.

Municipal services have checked out their systems over and over again. Not only engineering communications but also the landscaped zone is under their jurisdiction. By springtime the Moscow Olympic Village will become picturesque. Everywhere there will be little squares, flower beds, cascades of

ponds, and original works in the minor architectural forms. The total forest-park system of the complex occupies 307 hectares. Here are 290 blue spruce, thousands of other coniferous types of trees, and more than 4,000 deciduous trees: linden, ash, elm, small-leaf chestnut, oak, and maple.

If we merely enumerate the duties of the municipal-services workers, it will become clear how extensive they are. Among these duties are maintaining the territory's sanitary condition. Cleanliness will be maintained here by 21 machines: trash-collecting and sweeping machines.

Also already in a state of preparedness is the truck-trailer train, consisting of two small cars for 50 persons. The transport workers have drawn a plan for its route around the perimeter of the residential zone. There will be four regular stations, but at the request of the athletes the train can stop at any point along the route. The truck-trailer train will move at a speed of 20 km per hr.

Lighting may also be listed among the future concerns of the municipal-services workers. Soon it will blaze forth in a festive, attractive, multi-colored pattern. Colored illumination and decorative bias lighting will be utilized here. Patterns will employ the official color spectrum of the Olympics--light-blue, light-green, dark-green, orange, red, and yellow. These colors will create an attractive background--an Olympic rainbow. It was decided to make light-blue the predominant color--as a symbol of the peaceful blue sky above our planet. And then also the emblem of the 22nd Games, along with, of course, the talisman-mascot, Mishka, will become the principal elements of the illumination pattern.

The sports zone may be compared to a star, extending its rays into all corners of the Village. It will guarantee the participants in the Games the opportunity of carrying out their training without leaving its boundaries. At their service will be a first-class complex of enclosed structures as well as the following open areas: two volleyball and basketball courts each and three soccer fields. The main stadium, with its track-field-event sections in the middle, is framed by an eight-lane running track, while one of the training fields has been fitted out for the throwing events. We must also mention the individual courts for volleyball, basketball, tennis, and badminton. There is an enclosed pool at the disposal of the swimmers. The dimensions of the main pool are 25x25 meters. It is separated by a partition from two warm-up pools with dimensions of 16x11 meters. The complex also includes three block-type sports halls (24x42 meters with a height of 8 meters).

If I had to briefly define the merits of the Olympic Village, which has sprung up in the southwestern section of the capital, and which has already begun to live its own particular, intense life, I would probably choose the following words: spaciousness, light, air, up-to-date comfort, and convenience. And Lord Killanin, president of the IOC (International

Olympic Committee), after he became acquainted with this unique complex, stated: "The participants in the 22nd Games will be living in a very beautiful Village, where everything is striking--the well-thought-out details of the technical equipment and supplies, as well as the use of up-to-date materials."

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CONSTRUCTION

HOUSING CONSTRUCTION IN MOSCOW GROWS APACE

Moscow ZHILISHCHNOYE I KOMMUNAL'NOYE KHOZYAYSTVO in Russian No 1, Jan 80
pp 30-31

[Article by V. F. Shcherbakov, Chief of the Main Moscow Administration for Housing: "Concerns of Muscovites"]

[Text] The capital's housing system is a major sector of the national economy. In Moscow the total built-up area is considered to be about 130 million sq. meters. And the quality of these structures is at a high level. Stone or brick buildings account for 98.9 percent of the total, and of these some 92.7 percent have five or more stories. Almost no low-priced houses remain in the capital. During the past seven years approximately 27,400 obsolete buildings have been removed.

Some 78 percent of Muscovites live in individual apartments, supplied with gas, running water, sewers, central heating, bathrooms, and hot water.

At the present time great importance is being attached not only to expanding the scope of construction and civic improvements but also to preserving residential facilities, improving the operation and repair of houses, and providing services to the public.

The capital's housing workers consider the following two tasks to be of top priority. The first is, within a short time period, to bring into good order the old, basic, carefully preserved housing stock, to make major repairs on it, redesigning the communal multi-room apartments and bringing their public services and amenities up to the present-day level. The second is to preserve the buildings which were constructed during the post-war period, having all the types of services and amenities, and having introduced the system of planned, preventive maintenance and repair.

In the 10th Five-Year Plan the funds apportioned for capital repairs have amounted to 1 billion, 300 million rubles, which is 500 million rubles more than in the preceding five-year plan. The scope of these allocations is sufficient to satisfy the needs of the housing services, but only if they are correctly utilized. This has been facilitated by the introduction of planned, preventive maintenance and repair. Throughout the city as a whole

its volume has increased annually. The repair of houses along with re-designing them is also increasing.

The universal introduction of PPR (planned, preventive maintenance and repair) will allow us to reach a position whereby houses will be repaired not because of deficiencies but in order to prevent premature wear of the structural components. In order to concentrate apartment-house repair in the hands of one body, the Moscow Gorispolkom (City Executive Committee) created the Main Administration for the Repair and Modernization of Apartment Houses and Public Buildings. It includes repair and construction trusts as well as specialized trusts for finishing, sanitary-engineering, and other operations. Their capacities ensure the fulfillment of the tasks being planned.

More complicated is the organization of current repairs, building maintenance, the sanitary cleaning of and the trash collecting at housing properties. The fact of the matter is that material and labor outlays on operating modern buildings with the traditional methods are increasing by a factor of 1.5--2, and the operating personnel is growing in proportion to the increase in the area being serviced.

The group of housing workers is not being filled out rapidly enough, and this causes a regular shortage of workers in the operating organizations, which, in turn, has a negative effect on the quality of apartment-house maintenance. These difficulties are being eliminated; specialization is being introduced along with mechanization and automation of the processes involved; the administrative structure is also being improved.

During the last few years all operations with regard to the technical operation and current repair of the housing stock on negotiated terms have begun to be carried out by the repair and construction administrations of the rayon housing administrations. This has allowed the restoration (in accord with the system of planned, preventive current repairs) annually of more than 17 percent of the houses, as well as an increase in the quality of the operations, and an improvement in the form of conducting the work. To a large extent, this has been facilitated by the method of brigade contracting.

A great deal of attention is being paid to the effective elimination of deficiencies arising in the operation of structural components and engineering equipment. For this purpose an extensive network of emergency-dispatching service points has been created. At the present time in Moscow more than 620 ZHEK's (Housing Operations Offices) have been put on a dispatching basis. In addition to increasing the reliability of the systems, this has allowed us to lower the normative requirement for service personnel by more than 12,000 persons and to achieve a significant savings effect.

When speaking about putting residential micro-regions on a dispatching basis, we must also mention that within the housing system there is constant

improvement in the local automation of individual complexes and units. More than half of the central heating points being operated by the Main Moscow Administration for Housing are already operating on an automated basis, without any persons on duty. We have begun to introduce the next phase of conversion to dispatching--rayon-level dispatching systems, which will allow us to monitor the condition of a housing system on a rayon-wide scale, will provide us with the opportunity to operationally mobilize the forces of all the operational services in the event of accidents or breakdowns, and will assist us in organizing repair operations.

Integrated dispatching systems, rayon-level dispatching--these are the low-level units of an automated system for administering the system, the first phase of which is already functioning.

The system of dispatching service in case of breakdowns will also be further perfected by means of the maximum improvement of its organizational structure, of transferring to the ODS (Integrated Dispatching System) board additional parameters with regard to monitoring the closing of approachways, lofts, basements, savings on heat, water, and energy resources, as well as the further development and improvement of the ASU (Automatic Control System) of the housing system.

Another important link in this work is the sanitary cleaning of and trash collection from the housing properties. Under the jurisdiction of every rayon-level housing administration offices of mechanized trash collection of the territories have been created.

Extensive utilization is being made of municipal-type trash-collecting machines, along with special automatic machines and storage bins which are being created by the housing-system services. The scope of the operations being carried out by them has reached 18.5 million sq. meters, while the normative number of janitors therein has been reduced by almost 4,000 persons.

It must be said, however, that we still have too few machines. There is a very great need for up-to-date machines, especially for cleaning the so-called two-meter strips and chutes.

An important place in improving the operation of the housing stock is occupied by the production-technical base. The up-to-date production combine in Kur'ianov is capable of fully satisfying the demands of housing organizations for semi-finished goods, spare parts, and instruments. Modernization of the machine shop of the Moscow Elevator Association is proceeding apace, production areas and bases are under construction for rayon and municipal repair and construction organizations, along with garages for trash-collecting equipment, and service units for housing-operational offices.

A Moscow Housing Industrial Assembly Association has been created. Its task is to ensure the manufacture of items, their assembly into sets, and

delivering them to facilities, as well as supplying the system with materials.

During recent years there has been a considerable expansion of scientific research. The Moszhilniiprojekt employs about 1200 designers; scientific research projects are carried out in the field of improving methods of organizing and administering the system, as well as comprehensive studies made of operational processes and the creation of means of mechanization and automation, the development and introduction of ASU's (Automatic Control Systems), improving the operational qualities of the structural components and engineering systems of buildings, etc. Their total cost amounts to 400,000 rubles a year.

A great deal of aid to Moscow's housing workers is rendered by the AKKh (Academy of Municipal Services) imeni K. D. Pamfilov, the TsNIIIEP (Central Scientific Research Institute of Standardized and Experimental Design) for Housing, the TsNIIIEP for Engineering Equipment, the Scientific Research Institute for Sanitary Engineering, and the MISI (Moscow Engineering and Construction Institute) imeni V. V. Kuybyshev.

Bearing in mind that without a good administration and an improved organization neither capital investments nor new equipment will provide the necessary effect, we created an effective two-level system: rayon and municipal services for the housing system.

The rayon services are as follows: rayon housing administrations with dispatching service, remstroy (repair and construction) administration, a cleaning and trash-collection office, housing-operations offices (directorates for operating buildings).

The municipal services are represented by large, specialized organizations included within the Main Moscow Administration for Housing: the Moscow Elevator Association--engaged in operating and repairing elevators and ODS's (Integrated Dispatching Systems), Mosinzhremont (Moscow Engineering and Repair Office)--engaged in repairing and adjusting heating systems, Moszhilpromkomplekt (Moscow Housing Industrial Complex), the Moszhilremont (Moscow Housing Repair) Trust--engaged in repairing housing upon requests from the public and at their expense, the Moszhilniiprojekt Design and Scientific Research Institute, and the Data-Processing Center, all of which now more confidently solve the problems which are assigned to them.

The administrative structure of the rayon unit requires constant improvement. This is caused by the fact that in connection with the changes in the capital's housing stock, which have been complicated by the conditions of operating the buildings, as well as by the specialization of the housing system's services, a given unit does not have standard diagrams, and the number of its apparatus does not depend on the volume of operations to be carried out or the size of the area being operated. Now in five rayons of the city, based on rayon housing administrations, production housing-

and-repair associations have been created. Their structure and staffs are directly proportional to the dimensions of the area being operated and the volumes of the tasks involved, while a system of bonus awards depends on the time periods and the quality of the work being performed.

Ten more of Moscow's rayons are making the transition to such an administrative structure. The promulgation of these and other measures must facilitate improvements in the operation and repair of apartment houses, as well as raising the level and standards of services to Muscovites.

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CONSTRUCTION

PARTY'S ROLE IN BELORUSSIAN CONSTRUCTION MANAGEMENT EXPERIMENT TRACED

Moscow PARTIYNAYA ZHIZN' in Russian No 1, Jan 80 pp 32-37

[Article by Yu. Kolokov, Secretary of the Central Committee of the Communist Party of Belorussia: "Based upon the Experiment in Capital Construction"]

[Text] Soviet Belorussia's workers are selflessly and persistently implementing the 25th CPSU Congress's designs. They are executing industrial, housing and cultural and personal-services construction intensively. The republic's party organization is directing scientists, designers, architects and builders' collectives to search for new ways to further raise capital investment effectiveness and to put productive capacity into operation and to master it more rapidly. This most complicated task can be solved, as was pointed out at the 25th CPSU Congress, by improving the planning and management of the economy.

In implementing the congress's decisions, the CPSU Central Committee and the USSR Council of Ministers adopted decrees about improving the planning and managerial mechanism, which are of enormous importance for further developing Soviet economics and the whole national economy, including also such an important sector as capital construction.

The Central Committee of the Communist Party of Belorussia and the republic's Council of Ministers have worked out comprehensive measures for implementing these most important decrees. In order to raise capital investment effectiveness, the republic's material and financial resources are being aimed primarily at the reconstruction of existing enterprises and at reequipping them with machinery. The share of equipment in capital investment is being raised considerably, expansion of operations on the modernization of enterprises is being planned, and more economical designs are being worked out. In the first 4 years of the current five-year plan capital investment for these items was 2.2 billion rubles, which is more than twice as much as during the whole Ninth Five-Year Plan.

With a view to checking the practicality of a number of the most important concepts in the construction field, an experiment to improve planning of the production-economics activity of BSSR Minpromstroy [Belorussian SSR

Ministry of Industrial Construction] and to raise the role of economic methods in its work was started. Somewhat later this experiment was extended also to the activity of BSSR Minmontazhspetsstroy [Ministry of Installation and Special Construction Work].

The chief purpose of the experiment consisted in developing economic measures for action to further raise the effectiveness of construction operations and capital investment, reduce the duration and improve the quality of construction, impart regularity into the introduction of productive capacity and facilities into operation, and raise labor productivity on the basis of maximum use of the achievements of science and technology. It was intended to extend the operation of this mechanism also to other contracting organizations in the country after a check of all the principles and application of the appropriate amendments prompted by experience.

In this connection, I would like to speak about certain chief principles of the innovations. Settlements with clients are now being made for enterprises turned over for operation or for separate phases or startup complexes or facilities therefor that have been readied for the production of output or for the extension of services. Expenses for uncompleted operations of construction and installing operations are covered through bank credits.

Under the new management terms, the ministries operate on the basis of self-support, that is, they cover expenditures through income that remains at their disposal. Material encouragement for workers of their central staffs has been introduced, and the rights of ministries in the area of work and pay have been expanded. In particular, they are granted the right to create, organize and eliminate subordinate organizations and enterprises and to approve their standard staffs as well as the structure of the central staff of the ministries, within established manpower limits.

Experience of the work of BSSR Minpromstroy and BSSR Minmontazhspetsstroy indicates that the new system of indicators and economic stimuli is guiding construction organizations toward speeded up introduction of capacity and facilities into operation and is persuading them to concentrate supply, equipment, labor and financial resources at facilities due for startup. Back during the first year of operation under the new terms of management, the number of facilities being built simultaneously was reduced, the volume of uncompleted construction was cut, operating costs were reduced by 13.7 percent, and the standard time for doing construction work was cut for more than 200 facilities.

However, as experience has indicated, for successful realization of the experiment's principles, it is necessary to restructure radically the work not only of contracting organizations but also of all participants of the construction assembly line--clients, designers and the suppliers of equipment and structure. Therefore, the 28th Congress of the Communist Party of Belorussia, which met in 1976, required the republic's party, soviet and economic organs to view the improvement of capital construction as a most important task.

Substantial deficiencies in the organization and planning of construction and in providing construction projects with design and budget-estimating documentation, equipment, supplies, equipment and other resources are hindering introduction of the new management system. Deficiencies in planning, for example, were reflected in the fact that the republic's five-year task for amounts of construction and installing work were given to the Minister of Industrial Construction just in May 1977, while deadlines for the introduction of capacity were set only for the most important facilities. Other facilities, which comprised about 70 percent of the whole program, were not shown at all in the goals.

Serious irregularities in the timely delivery of equipment led to an extension of deadlines for putting a number of large items of capacity for the national economy into operation—for example, at Grodno's Azot Association, the Tsentrolit plant at Gomel', the Mozyr' Oil Refinery and other enterprises. For 34 of the most important construction projects alone, 65,000 units of equipment were not received on time last year.

There are still serious deficiencies in providing construction projects with technical documentation. Each year, as of 1 September, documentation for 10-13 percent of the planned volume of operations for the year is not received. This relates primarily to construction projects whose clients are enterprises and organizations of Union subordination. Construction organizations experience great difficulties because of frequent changes in design decisions during construction, late confirmation of the complexes due for startup, and delayed presentation of schedules for equipment deliveries.

All this occurs because clients, design organizations and supplying enterprises do not share equally with the builders the material and, yes, the moral responsibility for delays in introducing facilities and capacity into operation by the established deadlines. Penalizing sanctions under the agreement do not by far reimburse the expenditures that fall on the contracting organizations. The contractors, even with the maximum penalizing sanctions, cannot shoulder overexpenditure of the wage fund and the amount of the bonuses that they lose when deadlines for introducing facilities are extended. Thus, for the Avtogidrousilitel' plant of USSR Minavtoprom [Ministry of Automotive Industry] in the city of Borisov, commodity output worth 2.6 million rubles was not realized because of late delivery of equipment in 1978. This involved nonfulfillment of the plan for balance-sheet profit in the sum of more than 160,000 rubles and a reduction in the economic incentive fund of 37,000 rubles. At the same time BSSR Minpromstroy can present to this client penalizing sanctions of only 72,000 rubles, by spending many months to solve this problem through arbitration.

The conclusion suggests itself: on the whole, the experimental system can and should influence construction progress by means of economic levers, but many basic questions still require solution. Until they are solved, we will not achieve the active effect of the measures intended for construction progress.

The practice under which each year lists of titles of construction projects are newly drawn and approved, contractual agreements are concluded, funds for supply and equipment resources are formalized, and financing and credit-granting are opened up cannot put an end to disruptions of the construction process. The matter is aggravated still more by the fact that clients and contractors do not always have a clear view of the prospects for introducing capacity and facilities into operation.

The experiment also revealed other important deficiencies. Thus, in 3 years of operation under the new terms, not once did BSSR Minpromstroy use the right to obtain from clients 50 percent of the enterprise's profit for cutting construction time below the norm. Where these periods have been reduced, clients did not transfer capital because of their lack of financing sources. Apparently, the time has come to solve this question.

The Tsk KP [Central Committee of the Communist Party] of Belorussia and the republic's council of ministers are paying much attention to the conduct of the experiment. As experience has been gained, we introduce the necessary proposals to USSR Gosplan, USSR Gosstroy, USSR Gossnab, USSR Minfin [Ministry of Finance] and other Union ministries and agencies that are called upon to support the more successful introduction of the experiment being conducted. It must be said straight out that many of the proposals found a positive decision in the decree of the CPSU Central Committee and the USSR Council of Ministers, "Improvement of Planning and Intensification of the Effect of the Management Mechanism on Raising Production Effectiveness and Work Quality."

It stands to reason that the experiment and the economic levers for acting on various aspects of construction organization activity do not solve all the problems of the enterprises and subunits of the construction sector. We are not forgetting about the timely solution of such major tasks as improvement of the organization and management of construction, development of the production base on a qualitatively new basis, an intensification of party and political work with the people and concern about creating living and working conditions for the workers, and a rise in socialist competition activity. In all these questions, the party committees that guide the actions of the trade-union and Komsomol organizations and soviet and economic supervisory organs play the supreme role.

Thus, in order to introduce successfully into practice continuous two-year planning for the introduction of apartment houses and facilities for cultural and personal-services purposes and municipal services into operation, the Tsk KP of Belorussia and the republic's council of ministers adopted the decree, "Further Improvement of the Management of Construction in the Republic," which called for a concentration of resources in the capital construction administrations of the oblast, city and rayon ispolkoms. As a result of the purposeful organizational work of party committees at all levels, it proved possible for these administrations to execute planning and financing successfully, to provide construction projects with design and budget-estimating documentation and equipment, and to monitor progress in carrying out established plans. Master designers and

contracting organizations have been designated in each oblast for housing and nonindustrial construction.

We are convinced that the creation of the capital construction administrations (UKS's) of oblast, city and rayon ispolkoms is a more correct form for organizing the single-client service in both the city and the countryside. Thanks to this, the role and responsibility of the soviets of people's deputies for the state of affairs in capital construction have increased. Questions of raising effectiveness of the use of capital investment and the integrated construction of facilities for production, housing, cultural and personal-services purposes have begun to be solved more successfully, taking specific local conditions into account.

After the creation of a single-client service, all the work on the build-ups has begun to be done more precisely and at a higher level of urban development. More than 80 percent of the republic's kolkhozes and sovkhoses are making use of the services of the UKS's, which carry out the functions of the client and execute engineering surveillance. They have proved their capability to manage capital construction skillfully on the grounds of the rayon. In such rayons as Gomel', Mozyr' and Loyev of Gomel'skaya Oblast, all construction work in the countryside was transferred in 1978 to rayon ispolkom UKS's. Here are the results: annual plans for construction and the introduction of facilities into operation there were carried out successfully.

With a view to propagating the experience of Gomel'skaya Oblast builders, the TsK KP of Belorussia conducted in May of this year a republic seminar on improvement of the single-client service. Right now we are continuing further organizational work in this area.

The method of Orel's builders is constantly scrutinized by party organizations. Each day it is being introduced increasingly in the large construction organizations, such as the BSSR Ministry of Industrial Construction, the BSSR Ministry of Rural Construction and the BSSR Ministry of Installation and Special Construction Work. Minsk's builders provided for good work rhythm in 1976-1978. For example, in 1978 they turned over for operation 16.5 percent of the total housing space during the first quarter, 26.5 percent during the second, 28.5 during the third, and 28.5 percent during the fourth quarter. The builders of Gomel', Vitebsk and Bobruysk achieved approximately the same successes.

The flow-line construction method began to be introduced in BSSR Minsk'sstroy for the first time by Slonim Mobile Mechanized Column No 19. Its essence consists in the PMK brigades specializing and, as we say, carrying out the operations of a definite specialized flow-line group. This refers to the operations of the below-grade cycle and the erection of the buildings proper, finishing them, and so on. Mandatory conditions for introducing the flow-line construction method are the compilation of a critical-path network schedule for the movement of each brigade, the conversion of the brigades to economic accountability, payment for work that has been completely finished by the flow-line group, and organization of a

central dispatcher control and of services for outfitting the PMK's [mobile mechanized columns], with material incentives for engineers and technicians to complete each type of work on the various buildings under construction on time or ahead of time.

In the first year, the conduct of these measures in PMK No 19 permitted labor productivity to be raised by 12 percent, the number of jobs being erected simultaneously to be reduced by 30 percent and the periods for erecting them to be cut by almost one-third, and 42,000 rubles' worth of building materials to be saved. The work experience of this mobile mechanized column has begun to be applied by many construction and installing organizations.

BSSR Minsel'stroy has now established a single structure for specialized flow-line construction for all organizations. The designs for flow-line construction are included in annual and quarterly plans for the engineering and technical preparation for operations. This will enable plans for general-contracting general-construction subunits to be coordinated with plans for the work of the subcontracting organizations, and also with the system for supplying materials and equipment and for outfitting. BSSR Minsel'stroy is taking steps to improve the flow-line construction system and to propagate the advanced experience of the key PMK's to all low-level construction organizations.

The activity of this ministry to create mobile specialized brigades of electricians and plumbers supplied with motor-vehicle transport, with special sleeping vans and with mobile workshops that have the tools and simplest equipment needed for working at the job sites, merits attention. The labor productivity of such brigades in Montazhspetsstroy [Trust for Installation and Special Construction Work], which is doing electrical installation and plumbing work, is 1½-fold higher than that of others.

Improvement of the management mechanism and of work style and methods depends greatly upon the state of the administration's organizational structure. Relying upon the best experience, the republic's party and soviet organs are doing definite work in this area. The contracting organizations are being strengthened, and specialization by branch and by technology is being developed. Some large construction-operations associations with an annual volume of 40-80 million rubles' worth of contracting work have been established. Among them are such organizations as the Minsk Production Association for Industrialized Housing Construction, the Minsk Industrial Construction Trust, the Gomel' Industrial Construction Trust, and the Grodno Industrial Construction Trust of BSSR Minpromstroy.

It must be said that experience has confirmed the effectiveness of the policy of establishing large construction associations. The experience of the Minsk Production Association for Industrialized Housing Construction can be cited as an example. Prior to the start of the Tenth Five-Year Plan, a trust for city-block development and two housing construction combines erected large-panel housing in our republic's capital. Simultaneously a new plant with a capacity of 200,000 square meters of living

space annually was established. Given the forms of organization and administration that were traditional at that time (1976), still another housing construction combine should have been created. However, another solution was adopted--to take the route of consolidating and concentrating production, simplifying the operating links and creating a production association for industrialized housing constructed, based upon the organizations referred to. The Minsk Housing Construction Combine No 1 imeni 50-letiya SSSR became its base.

The scale of this organization and the results of its activity can be judged by the following figures: the volume of construction and installing work done in 1978 reached 74 million rubles, worker manpower reached 8,400, 607,000 square meters of total apartment-house space were put into operation, and profit was 14.7 million rubles, while yield on capital grew by 43.6 percent over 1975. The rhythm and quality of construction rose. The plan for introducing facilities into operation is being fulfilled systematically.

Later on, a solidification and expansion of economic accountability and wider use of the Zlobin method will have great significance in raising capital construction effectiveness. Today the brigade contract is becoming not only a progressive form for organizing work but also an active lever for restructuring the operating mechanism and a tool for improving planning and control. The Grodno Housing Construction Combine has gone further in this direction than other construction collectives. Here they have transferred from the brigade to the section contract, and already now the section, which has specialized teams within it, concludes a contract for the erection and turnover for operation of a finished building, not to mention the economic settlement and other criteria of the Zlobin method. It is not by accident that the combine's activity is marked by high steadiness in fulfilling plan tasks. During the past 3 years it has turned over 15,000 square meters of housing space above the plan.

Belorussia's construction base is being developed on the basis of a comprehensive scheme over the period of two five-year plans. A policy of creating new and rebuilding existing enterprises that make effective structure and materials has been adopted. In recent years, large high-capacity facilities for producing lightweight metal structure, keramzit, facing brick, high-grade brick, safety glass, ornamental glass, facing slabs made of natural stone, and effective reinforced concrete structure with a high degree of factory finish have been introduced.

We are now erecting about 60 percent of the production buildings and up to 70 percent of the apartment houses by the fully prefabricated construction method. We will henceforth hold to the line of further increasing the share of prefabricated apartment houses, raising the level of industrialization of all steps of the construction process, and making more effective use of machinery and mechanisms.

In order to supply the builders more completely with machinery and mechanisms, the republic's machinebuilding enterprises are charged annually with

manufacturing 700-750 units of highly productive mechanized equipment. The realization of measures for introducing progressive domestic and foreign experience into construction, and also mechanization equipment, will enable labor productivity to be greatly raised in construction.

The republic's party organization has placed a high priority on questions of improving the builders' working and living conditions. It is planned to create in the next few years for construction organizations a housing inventory in such amounts that each worker who does not have a family will be able to have a place in a dormitory and, after the formation of a family and after 2 or 3 years of continuous work in one construction organization, an apartment in housing for small families. After 5 or 6 years of continuous service, a separate apartment with the amenities will be allocated.

It is planned to erect in the republic a plant for producing personal-services premises for the needs of construction organizations. New, more comfortable and high-quality models of special work clothing and footwear have been created that will be provided all workers in the near future. Ten percent of the places in kindergartens and nurseries introduced into operation, regardless of the agency of ownership, will be allocated to construction organizations. Concern about everyday living conditions for builders, the creation of good conditions for working and for recreation affect morale positively, improve their frame of mind and, in the final analysis, lead to greater labor productivity.

Republic seminars in which managers of party, soviet and economic organizations take part, which are organized annually by the Central Committee of the Communist Party of Belorussia, have become an important direction in the wide propagation of advanced experience of construction organizations. They are a good creative school for all participants in capital construction.

Positive advances have occurred in recent years in the work of the party's oblast, city and rayon committees that concern the supervision of construction projects by party organizations. Questions associated with this important branch of the national economy now are being discussed increasingly frequently at plenums and in the bureaus of party committees. The approach to their discussion also has been changed. While previously many current--so-called "burning"--questions connected with introducing various facilities into operation and with various instances of a lack of coordination during construction were reviewed, now the main attention is paid to improving party-organization work and popular political work within party organizations, to further raising the vanguard role of communists in production, and to working with personnel.

City committees of large cities are creating, in an experimental procedure, single party organizations that will unite the communists of construction and installing administrations and specialized sections and the directors of client enterprises that are located within one city. This is being done with a view to strengthening the party's influence on the progress and quality of construction, raising the level of organizational and

popular political work at construction projects, concentrating efforts on solving tasks of paramount importance, and providing for coordinated actions.

Recently, councils of the secretaries of party organizations and of temporary provisional party groups have begun to be created directly at construction projects. They help to raise the vanguard role of communists and the labor activity of all construction workers. Communists of the labor collectives that are erecting various facilities are holding joint meetings.

Belorussia's communists are striving to do everything possible to see to it that construction--this important sector of the national economy--carries out successfully the tasks set before it.

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USSR GOSSNAB ORGANS SHOULD SUPPLY CONSTRUCTION PROJECTS

Moscow EKONOMIKA STROITEL'STVA in Russian No 1, Jan 80 pp 35-38

[Article by N. T. Arkhipets, deputy chairman of USSR Gossnab: "Supply to Construction Sites Through Agencies of USSR Gossnab"]

[Text] The 12 July 1979 decree of the CPSU Central Committee and USSR Council of Ministers entitled "Improving Planning and Strengthening the Impact of the Economic Mechanism on Raising Production Efficiency and Work Quality" orders USSR Gossnab to complete, in 1981, the transition of construction projects included in the state plan of capital construction to full supply of materials through territorial material-supply organizations on the basis of orders from construction-installation organizations in conformity with their needs as defined by plans and estimates.

This system of supply was employed as an experiment in 1970 at six large territorial construction organizations which performed 1.5 billion rubles worth of construction and installation work. In 1979 this form of supply had already spread to 27 such organizations doing a total of 5.3 billion rubles worth of construction and installation.

Supply through territorial material-technical supply agencies of USSR Gossnab has had a beneficial impact on the basic technical-economic work indexes of construction organizations. According to calculations by NIIMS [All-Union Scientific Research Institute of Material-Technical Supply] of USSR Gossnab, organizations switched to supply by order were able last year to raise labor productivity by two percent as the result of timely, full supply and they reduced the prime cost of construction and installation work by four percent compared to the previous level. The comments of construction and installation organizations switched to this form of material-technical supply are extremely positive.

Concentration of material resources in the national system of material-technical supply insures better concentration of supplies at priority

start-up projects and important planning sites and permits maneuvering with supplies.

Concentration of material-technical resources in any sector of physical production permits a significant savings of these resources because centralization mitigates tendencies and forces which could disperse them. This is the basis for saving other resources as well and allows a comprehensive approach to recording and assessing losses of both embodied and live labor, which depends enormously on the level of organization and management of construction work.

This offers an opportunity for flexible operational maneuvering with resources. On the basis of work experience it can be reported that with respect to reinforcement steel for various construction organizations in Gomel', Belorussian SSR, interdepartmental maneuvering would permit elimination of 70-100 percent of the operational shortages of this material.

The 12 July 1979 decree of the CPSU Central Committee and USSR Council of Ministers set the goal of improving agencies (organs) involved with state supply to construction. Fulfillment of this important party and state decision demands a great deal of hard work by construction, planning, supply-marketing, and design organizations. Construction sites can be successfully switched to the new system of supply if the territorial agencies of USSR Gosnab and construction organizations rely on local party and Soviet agencies and involve practical workers and scientists engaged in the organization of material supply to construction in this work.

In recent years USSR Gosnab, jointly with the USSR Ministry of Construction of Heavy Industry Enterprises, Ministry of Industrial Construction, Ministry of Construction, and Ministry of Power and Electrification, whose organizations have been switched to comprehensive supply through territorial agencies of USSR Gosnab, have worked out important organizational, technical, and economic measures to improve supply to construction sites. Some structural reorganization has been carried out at the agencies of the Union republic gosnabs and the rayon material-technical supply administrations, in which subdivisions for supply to construction and independent agencies to supply construction sites in regions of concentrated construction have been formed. The territorial agencies of USSR Gosnab have formed a network of highly mechanized enterprises to deliver products and enlarged the volume of centralized delivery. Production services are being introduced, along with container shipping and delivery of products to construction sites in containers.

When all construction sites included in the state plan of capital construction are switched to this form of material-technical supply, the volume of construction and installation work done at them will be approximately 12 times greater than that done at construction sites supplied through USSR Gosnab agencies today. If we add that roughly two

years has been given for all work related to the reorganization of supply, the difficulty of the problems posed becomes clear. This means that our approach to solving these problems, and there are many of them, must be that much more serious and operational.

In our opinion, to complete the transition of all construction sites included in the state plan of capital construction to material-technical supply through USSR Gossnab agencies in 1981, we must adopt as our basis the established system of mutual relations between construction-installation organizations switched to this form of material-technical supply and the territorial agencies of USSR Gossnab and between construction ministries and USSR Gossnab.

The decision on how many and when to switch construction sites to comprehensive material-technical supply through territorial agencies of USSR Gossnab should be made by USSR Gossnab and the appropriate construction ministry, with joint development and ratification of organizational, technical, and economic measures to improve supply to construction sites.

The measures must envision decisions to establish or expand the storage facilities of USSR Gossnab in the regions where construction sites and construction industry enterprises are located. These decisions on the organizational structure of rayon territorial agencies of USSR Gossnab and the supply-marketing organizations of the construction ministries and construction-installation organizations should probably take up the issue of the construction ministries' transferring to USSR Gossnab the staff personnel and wages fund of those employees engaged in supply to organizations switched to material-technical supply through USSR Gossnab agencies at earlier times also.

The transition of construction-installation organizations to comprehensive supply of materials through USSR Gossnab territorial agencies should probably be done in stages.

In the first stage, it is wise to switch the construction organizations of the USSR ministries of Construction of Heavy Industry Enterprises, Industrial Construction, Construction, Rural Construction, and Power and Electrification to supply through territorial Gossnab agencies. The USSR Gossnab agencies should supply construction sites with the following materials, the need for which is determined by plans and estimates: rolled ferrous metal products, all types of pipe, lumber, cement, and construction and other materials according to the assortment of products included in the state plan of economic and social development of the USSR, USSR Gosplan, and USSR Gossnab.

It is advisable for the construction ministries and their local agencies to continue supplying the organizations being switched with means of transportation, machinery, mechanisms, and equipment, and industrial and food goods according to the assortment list of USSR Gosplan, products on the assortment list of the ministries and departments, reinforced prefabricated concrete, metal construction elements, cabinet

goods, local and inert building materials and articles made of them (bricks, slabs, keramzit, and the like), and fuel.

With expansion of the system of supply by plans and estimates, in our opinion, the established system of allocating funds for materials to USSR Gosnab must be revised. It would be advisable, instead of allocating funds to USSR Gosnab by reducing them for the construction organizations, to establish a system whereby USSR Gosplan together with USSR Gosnab, basing themselves on the volume of work and existing norms, would determine construction organizations' need for materials which are allocated by USSR Gosnab and transfer such materials to USSR Gosnab from general resources envisioned for capital construction.

The transition of construction sites to the system of supply by orders must be based on meeting a number of conditions. In our opinion, the most important conditions are the following:

- a. unconditional fulfillment of plans for delivery of materials by allocated funds in the necessary assortment;
- b. establishment, within existing norms, of stocks of full sets of the necessary assortment of rolled metal products and other materials needed by construction sites;
- c. closing off all channels by which materials are lost, eliminating above-norm stocks, and imposing ceilings on expenditure of materials and construction components.

The system of norms for use of materials must be straightened out. Above all the question of norms for stocks of materials needs to be reviewed. Planning, statistical, and other agencies have a tendency to reduce norms for stocks of materials, considering this a positive step given the existing scarcity of materials.

Of course, well-founded reductions in norms for stocks of construction materials and components are justified. However, in many cases, such a change in the norm leads to disruption of the production process and creates an additional scarcity of the resources.

The well-established term "management of stocks" also needs to be interpreted critically and revised. For a wholesale trade depot, possibly, where the variable demand of the trade system is satisfied the management of "stocks" and related expenditures may serve as a final goal. But in highly dynamic systems whose final goal is launching products with given time and resource constraints, this approach

is sometimes difficult to explain. Where the period of construction is one or two years and the consumption of materials within this time is very uneven, the stock of materials cannot always compensate for breakdowns that occur through no fault of the construction system. From our point of view, it is wise and correct to pose the question of stabilizing flows of materials making use of stocks as a means to achieve such stabilization. When the matter is organized in this way it would be incorrect to establish a uniform norm of stocks on a large scale.

The methodological approach and consideration of the actual dynamics of flows of materials will permit a differentiated approach to solving this question. It follows from this that the authority of USSR Gosstab agencies to calculate necessary stocks and determine the ratio between the transit and warehouse forms of supply must be expanded. Studies show that the availability of metal for a whole range of construction systems corresponds to the planned need when broken down by year, quarter, and even month. But within the month operational shortages occur. The formation of operational stocks makes it possible to reduce peak demands for metal by construction workers, although they are always inevitable.

The significant reserves that exist for saving materials can be judged from the example of cement. Studies have shown that inadequate monitoring of compliance with technological requirements and a shortage of standard automatic monitoring and regulating equipment cause an average overexpenditure of 5-6 percent of the cement used in the production of reinforced prefabricated concrete. Thus, the cement received at construction enterprises is not always weighed, and there are significant discrepancies (sometimes as much as 60 percent) in the estimates of cement activity made by the suppliers and the customers. Claims work is very poorly organized. And yet, with such rough measurements of actual flows (the technical equipment available at many enterprises only allows the flow to be measured within error of ± 30 percent), report documents give figures on the savings or overexpenditure of cement down to hundredths of a percentage point. From this we can conclude that it is essential to introduce technically sophisticated systems for measuring and keeping track of resources in construction, which will make it possible to achieve real, not hypothetical, savings.

The unsatisfactory situation with records and use of materials at construction enterprises results from inadequate planning and distribution of these resources at higher levels. The gap that has come about between the "millionaire" (expenditure norm for materials per 1 million rubles of construction and installation) and the actual need for resources has been discussed a great deal and is still under discussion. In any case, the actual need is calculated on the basis of plans, estimates, or norm documents (for example, selection

of the composition of concretes). These documents reflect many research results, which is something that cannot be said of the "millionaire." It is common knowledge that these norms are calculated on the basis of the construction plans and estimates of the submitting enterprises and therefore represent, to some extent, averaged expenditure norms. In our opinion, the area and levels of use of "millionaires" should be carefully defined to preclude unnecessary argument about the justification for their application. Switching construction to planning and evaluating activity by final results demands a coordinated and simultaneous transition of the system of material-technical supply to new, more improved forms of supply to construction organizations through territorial agencies of USSR Gosplan on the basis of plans and estimates. Failure to meet this challenge may cause breakdowns in methods of determining needs for material resources and procedures for delivering them and in insuring effective checks on the use of resources.

In our opinion, the time has come to establish a fundamentally new organizational structure for supply to construction sites through territorial agencies of USSR Gosplan. The existing USSR Gosplan structure was organized to supply materials to industrial production.

To begin with, we should note a definite difference in principle between the output of the construction sector and the output of industrial sectors. Moreover, the level of standardization of construction projects is not comparable to that of industrial output.

This demands the development of norms, methods, and principles of calculating needs for resources and their distribution which will be acceptable for the non-standardized conditions typical of construction. This may be done by specialized supply agencies with a high level of engineering orientation.

With the transition to supplying construction through agencies of USSR Gosplan a redistribution of functions among USSR Gosplan, USSR Gosplan, and the ministries and departments occurs; the responsibility and, naturally, rights of material-technical supply agencies increase. In turn, there is a specialization of the activity of the construction ministries and departments in organization of supply. Their primary role is to insure the successful work of the material supply system within production associations and trusts and to raise the level of engineering preparation for construction. The construction workers, receiving their resources through USSR Gosplan agencies, should defend this need to them. This does not violate the rights of ministries but, on the contrary, increases their accountability for the use of resources and eliminates multiple levels in planning and determining resource needs.

The legal aspect of the stage of planning material-technical resources is changing. The center of gravity is shifting to the agency

responsible for supply and therefore, probably, USSR Gosnab should act as the holder of funds, which is not its current status. At the present time USSR Gosnab has greater responsibility than it has rights. While distributing and planning output only for its own assortment list, USSR Gosnab and its territorial agencies are also responsible for comprehensive, guaranteed supply. The real issue should be expanding the assortment list and receiving the right to operational planning, which is not actually a function of USSR Gosplan as the agency expected to plan national economic proportions.

Then the level of responsibility of supply organizations or support to capital construction will change and USSR Gosnab will have real feedback in its management of material resources and an opportunity to maneuver operationally with these resources.

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INTRODUCING FOB-SITE PRICING SYSTEM INTO CONSTRUCTION

Moscow EKONOMIKA STROITEL'STVA in Russian No 1, Jan 80 pp 51-57

[Article: "Step up the Introduction in Construction of the New System of FOB-Construction Site Prices"]

[Text] From the Editors

No 8 of the journal EKONOMIKA STROITEL'STVA for 1978 published a selection of articles which reviewed the primary methodological principles of switching to charges for delivery of local building materials and reinforced concrete articles at FOB-site prices and discussed the years of experience with use of this progressive system in the Latvian SSR and Estonian SSR, where it has been in operation since 1969, and in the Uzbek, Moldavian, and Armenian republics, where the system has been employed since 1974.

As experience demonstrates, switching to accounts based on FOB-site prices is an effective means of organizing price formation in construction on the basis of introducing a uniform level of oblast (or republic) estimated prices, precluding influence on the work indexes of contracting organizations by "external" factors unrelated to their production activity, and reducing transportation expenditures.

Solving these problems is especially timely in light of the decree of the CPSU Central Committee of the USSR Council of Ministers entitled "Improving Planning and Strengthening the Impact of the Economic Mechanism on Raising Production Efficiency and Work Quality."

Even though the basic methodological questions of the transition to charges based on FOB-site prices have been solved and considerable experience accumulated with their practical application, this price system is spreading to new oblasts, krais, and republics at a very slow pace.

For this reason the editors of the journal EKONOMIKA STROITEL'STVA, together with the Scientific Research Institute of Construction Economics of USSR Gosstroy, decided to conduct a "meeting" by correspondence to review the factors that are holding back the spread of this progressive know-how and to help determine ways and means to spread the system of FOB-site prices. Representatives of a number of construction ministers, gosstroys of the Union republics, oblast executive committees, planning institutes, and establishments of USSR Gosbank and USSR Stroybank were asked the following questions:

1. What steps have been taken to insure further dissemination of the FOB-site price system in conformity with the plan, ratified by USSR Gosstroy, to switch to the system of FOB-site prices in 1978-1979?
2. What problems must be encountered during work to switch to FOB-site prices? What is done to overcome them? Which organizations must be involved to solve the problems on which broad dissemination of the system of charges based on FOB-site prices depends, above all charges for delivery of reinforced prefabricated concrete;
3. What are the prospects for the spread of the system of FOB-site prices as a necessary prerequisite for a fundamental reordering of the system of estimates and price formation in construction and what proposals can be made on ways and means to introduce this system on a large scale during the transition to new estimate norms and prices in the 11th Five-Year Plan?
4. The plan ratified by USSR Gosstroy for switching to the system of FOB site prices in 1978-1979 envisions preparatory work to support introduction of this price system in Azerbaijan, Belorussia, Georgia, and Lithuania, in Kaluzhskaya, Kurskaya, Rostovskaya, Tul'skaya, Ulyanovskaya, and other oblasts of the RSFSR, and Voroshilovgradskaya, Dnepropetrovskaya, Donetskaya, and other oblasts of the Ukrainian SSR. We publish below a survey of written materials received by the editors.

Among those who submitted statements on the first question posed for discussion were A. M. Telesh (chief engineer of the Belgosproyekt [Belorussian State Planning] Institute), A. L. Zapol'skiy (chief engineer and deputy manager of the Belorussian SSR office of USSR Stroybank), A. V. Pirtskhalava (deputy chairman of Georgian SSR Gosstroy), M. G. Novak (chief of the estimate-contract division of the Georgian SSR Ministry of Construction), I. N. Kuzina (deputy department

chief at RSFSR Gosstroy), N. I. Almazov (deputy chairman of the Kaluzhskaya Oblast executive committee), V. Ye. Kurbatov (deputy chairman of the Ul'yanskaya Oblast executive committee), A. V. Volosatov (acting chief of the estimate-contract administration of the USSR Ministry of Construction), Yu. B. Trofeyev (deputy chief of an administration at USSR Gosbank), and I. P. Kizel' (group chief of the Orgtekhstroy Trust of the Azerbaijan SSR Ministry of Industrial Construction).

A. M. Telesh and A. L. Zapol'skiy reported that as long ago as 1976 the Belorussian Gosstroy developed and ratified price lists containing FOB-site prices and supplements to these price lists which take into account changes in the assortment of reinforced concrete articles produced in the republic in recent years under the influence of scientific-technical progress. A. V. Pirtskhalava observed that all preparatory work in the Georgian SSR was completed by November 1976. According to the statement of I. N. Kuzina, the necessary appropriations have been made for work on preparations for the transition to the system of FOB-site prices in various autonomous republics and oblasts of the RSFSR.

N. I. Almazov reported that in 1979 the Kaluzhskaya Oblast executive committee held a session of its Technical Council at which it and other interested organizations heard a report by the Kalugagrazhdanproyekt [Kaluzhskaya Oblast Civil Planning] Institute on preparations for the switch to the system of FOB-site prices in the oblast.

In Ul'yanskaya Oblast, V. Ye. Kurbatov reported, an interdepartmental commission has been formed and assigned to study questions related to the transition to the system of FOB-site prices. The leading construction organizations, Glavul'yankstroy [Main Administration for Construction in Ul'yansk] and the Ul'yanksel'stroy Ul'yanskaya Oblast Rural Construction] Trust, are now working to prepare the initial data for drawing up transportation systems. The Ul'yankgrazhdanproyekt [Ul'yanskaya Oblast Civil Planning] Institute is writing up FOB-site prices.

I. P. Kizel' reported on the general completion of preparatory work for transition to the system of FOB-site prices in the Azerbaijan SSR. They have worked out FOB-site prices there for four consolidated zones (instead of the 14 zones for which estimate prices were developed), and these zones have been reconciled with the republic ministries of Rural Construction and Industrial Construction. The organizational forms for transition to the system of FOB-site prices have been determined on a preliminary basis and appropriate proposals have been submitted to the republic government.

Yu. B. Trofeyev observed that USSR Gosbank has taken part in all activities conducted by USSR Gosstroy and other departments and ministries to introduce FOB-site prices. Thus, USSR Gosbank took an active part in

working out charge schemes for delivery of material at these prices and together with USSR Gosstroy, USSR Stroybank, and the USSR Ministry of Finances worked out recommendations on the organization and procedures for payment for comprehensive deliveries of construction components and parts. These recommendations envision broad use of FOB-site prices. The new edition of instructions of the organization of accounts in the national economy include, for the first time, principles regulating the procedures for clearing accounts with FOB-site prices.

In the opinion of NIIES [Scientific Research Institute of Construction Economics] of USSR Gosstroy, the answers given by organizations to the first question gives a two-sided impression. Although steps have already been taken or are being taken at the present time to prepare for the transition to the system of FOB-site prices in some regions, in fact no actual changes in spreading the system of FOB-site prices to new oblasts and republics have been observed in the recent past. As far as information received permits a judgement, the preparatory work is not sufficiently energetic and the impression is formed that this work is not aimed at attaining the final result of introducing the new system of prices. Instead, at the present time most of the attention is being given to just one aspect, working out lists of FOB-site prices.

However, the Methodological Recommendations published by NIIES of USSR Gosstroy on development and application of FOB-site prices in 1975 and writings on experience with the transition to the system of prices in various regions (see EKONOMIKA STROITEL'STVA 1978, No 8) define pretty clearly the range of basic questions which should be solved in the preparatory stage. At this time it is necessary to determine the marketing organizations that will make deliveries at FOB-site prices; decide what schemes should be for charges for deliveries (through the marketing organizations, by "difference" in transportation expenditures, and so on) based on the structure of established economic ties and bearing in mind the desirability of speeding up turnover of capital; prepare and ratify new conditions for delivery of materials at FOB-site prices, and so on.

However, as the answers received testify, proper attention is not being given to working out and implementing these measures in the local areas. It appears that this is the reason for the situation that has come about in a number of regions where the transition to the new system of prices was planned to be carried out in 1978-1979.

The editors of the journal EKONOMIKA STROITEL'STVA received answers to the second and third questions from most of the above-mentioned participants in the discussion, as well as A. K. Yakovlev (chief of the estimate-contract division of the Ukrainian SSR Ministry of Construction of Heavy Industry Enterprises), L. M. Rozov (chief of the estimate-contract administration of the USSR Ministry of Rural Construction).

V. I. Ivanov (deputy chairman of the Kurskaya Oblast executive committee), and others.

In the opinion of A. M. Telesh and A. L. Zapol'skiy, one of the factors holding up introduction of this system of accounts in the Belorussian SSR is that attention at the Belorussian SSR Ministry of Industrial Construction has been focused entirely on the experiment underway with improving the planning of production activity and enhancing the role of economic methods in its work. At the same time they express the idea that introduction of the system of FOB-site prices should precede the transition to the new estimate norms and prices planned for the 11th Five-Year Plan. For this reason it appears advisable to move quickly to introduce FOB-site prices, especially in regions such as Belorussia where the preparatory work is done.

A. V. Pirtskhalva, observing that preparatory work for the transition to the system of FOB-site prices was done in the Georgian SSR in 1976, stressed that this system is not in effect there because the republic's ministries of Construction and Rural Construction insist on creating delivery conditions which would insure centralized delivery of all output to customers, including deliveries involving mixed shipments. Meeting this demand requires setting up transport-dispatching enterprises and bases at railroad stations. A. V. Pirtskhalva shows that directive agencies need to pass a special decree to introduce the new system of accounts.

Among the factors which would eliminate existing obstacles to introduction of the FOB-site system in the Georgian SSR M. G. Novak named the following: publication of an adequate edition of price lists ratified by the republic Gosstroy; a solution to the problem of setting up transport-dispatching and transshipment bases at railroad stations, supplying operational communications to enterprises and construction sites, making certain corrections in the special conditions for delivery of material at FOB-site prices which were ratified by republic agencies.

As G. M. Khaykin, division chief at NIIIES of USSR Gosstroy, who was asked by the editors to comment on these answers, observed, the description of difficulties with introduction of accounts based on FOB-site prices in the Georgian SSR as given in the reports by A. V. Pirtskhalava and M. G. Novak illustrates that there are no serious, insuperable obstacles to introduction of this system in the republic. Thus, the question arises: what is preventing republic organizations from publishing an adequate number of the price lists ratified way back in 1976 or reaching agreement in the established manner on the particular points of the special conditions for delivery of materials at FOB-site prices? Solving the problem of setting up transport-dispatching enterprises and bases at railroad stations is more complex. But here too a great deal depends on the initiative of the republic construction ministries. Two years ago they and the railroad

administration were supposed to analyze the structure of the flow of building material freight at particular stations and, if necessary, make proposals on setting up transport-dispatching enterprises and bases at those stations where this would be technically feasible and economically advisable.

However, and this must be emphasized, the lack of such enterprises is not a good reason to put off introduction of the new system of prices. Where these functions are not performed in a centralized manner the expenses of contracting organizations to haul materials from destination stations to construction sites will be compensated fully by the marketing organization.

When assessing this aspect of the problem, we cannot overlook the fact that mixed shipments, especially of massive reinforced concrete, account for a significantly smaller part than direct vehicle shipments.

In other words, the problem of stabilizing the transportation costs of contracting organizations is solved on a rational economic basis when payments are made for deliveries at FOB-site prices in those cases where these organizations haul the materials from the railroad stations with their own personnel and equipment. The experience of the Latvian SSR and Estonian SSR, which was discussed in detail in the articles by E. P. Polkovnikova and Ye. Ye. Zolotov (EKONOMIKA STROITEL'STVA 1978, No 8), indicates that this is a sound approach to solving the problem. In those republics FOB-site prices have been used for 10 years, but even today construction organizations haul some of the materials from the destination railroad stations and, in exceptional cases, even from the manufacturing enterprises.

Therefore, there is no reason to state the question as though the transition to the system of charges based on FOB-site prices is impossible because there are no transport-dispatching enterprises and bases at railroad stations.

A. K. Yakovlev emphasized that the introduction of FOB-site prices requires first of all that there be a marketing (complete supply) organization that bears economic accountability for timely and complete delivery of materials manufactured by different ministries. I. N. Kuzina (RSFSR Gosstroy) and V. Ye. Kurbatov (Ul'yanovskaya Oblast executive committee) point out the need to establish marketing organizations that will guarantee uninterrupted supply of materials to construction sites as one of the factors that is essential for the functioning of the system of FOB-site prices.

From the Editors

It is obvious that this is one of the key issues of the problem. However, as practical experience shows, and this was

treated in detail in EKONOMIKA STROITEL'STVA No 8 for 1978, the possibilities of different alternatives for solving it must be taken into account.

Thus, the first alternative reflects conditions where there is a single marketing organization in the oblast (kray or republic) that delivers reinforced concrete articles and local building materials to all customers. This alternative has been used, for example, in the Latvian SSR and Moldavian SSR and was discussed in detail in the articles by E. P. Polkovnikova and A. I. D'yachkov.

However, other variations are also possible. In Estonia two organizations make deliveries at FOB-site prices (see Ye. Ye. Zolotov's article), and in Armenia three marketing organizations are making deliveries at these prices (see the article by A. U. Avakyan). These published articles show convincingly that when switching accounts based on FOB-site prices consideration must be given to the organizational forms of marketing and delivery of materials that are established in the particular region.

In other words, it is incorrect to pose the question of setting up a marketing organization as a condition for the transition to FOB-site prices. On the contrary, this system is an instrument whose use promotes involvement of existing marketing (full supply) organizations who link customers to manufacturing enterprises in these accounts, and on this basis they are given an economic interest in establishing efficient schemes of delivering materials to customers according to ratified distribution plans.

I. P. Kizel' observed that, as an analysis which was done showed, introduction of FOB-site prices in Azerbaijan should only be done on the basis of existing forms of marketing and delivering construction materials and components.

On this subject G. M. Khaykin observed that one of the basic methodological principles of the transition to the system of FOB-site prices, and one that has fully proven itself in practice, envisions that they will generally be introduced in adaptation to the organizational forms of marketing and supplying local materials and articles that are established in the oblast (kray or republic). Therefore, the thesis advanced by certain economists that it is necessary to set up new marketing organizations (unified for the oblast, nondepartmental, and others) as a prerequisite to the switch to accounts based on FOB-site prices is unsound, despite all its outward attractiveness. It reduces the fairly complex and multifaceted problem of revising the organizational structure of the marketing and delivery of

building materials to the level of an elementary problem and, in actuality, reflects a mistrust of the possibility of switching to the new system of prices and accounts under the organizational forms of marketing building materials that exist today in most oblasts, krais, and republics.

The error of this position follows chiefly from the principle of planned distribution of material resources, which includes local building materials and reinforced concrete articles. Implementation of this principle involved ratification of plans for distribution of materials by organizations of the ministries (and departments) in the local areas and assignment of ceilings to them which take into account the production capacities of the enterprises. Customers are assigned to manufacturing enterprises in conformity with ratified plans for distribution in each oblast, kray, autonomous republic, and Union republic without oblasts by means of issuing orders (or other documents that substitute for them) for delivery. In most oblasts and republics this job is done by the supply and marketing administrations of the oblast executive committees or territorial agencies of USSR Gosnab for local building materials and by the corresponding ministry or departmental organizations for reinforced concrete articles.

The transition to accounts based on FOB-site prices assumes that these (in most cases existing) organizations will be drawn into the system of accounts and as a result conditions will be created that give them an economic interest in shaping rational plans for delivery of materials in the region.

The experience of rayons where the transition to accounts for delivery of materials at FOB-site prices has already been made shows that this is exactly how to solve the problem. This was discussed in detail in the selection of articles on the topic carried in *EKONOMIKA STROITEL'STVA* (1978, No 8).

What has been said now becomes especially timely in light of the CPSU Central Committee and USSR Council of Ministers decree entitled "Improving Planning and Strengthening the Impact of the Economic Mechanism on Raising Production Efficiency and Work Quality," which envisions, among other steps, basically completing the transition to centralized delivery of the products of the supply and marketing depots of territorial agencies of the USSR Gosnab according to coordinated general-purpose transportation schedules, and where necessary using USSR Gosnab transportation, during the 10th Five-Year Plan.

"In discussion of this problem, however, certain participants in the business meeting by correspondence," G. M. Khaykin feels, "are taking a position which suggests that there is no experience whatsoever with the transition to the system of FOB-site prices, as if the subject

is not discussion of material concerning this experience but rather formulating new problems untested in practice."

An analysis of the statements of N. I. Almazov, V. I. Ivanov, and V. Ye. Kurbatov permits the identification of the three main circumstances they feel are standing in the way of switching to the system of accounts based on FOB-site prices:

1. Construction is carried on in an oblast with the personnel of contracting organizations subordinate to different ministries;
2. Territorial dispersion and lack of departmental coordination among manufacturing enterprises;
3. The lack of a single marketing organization.

As for the first two circumstances, they obviously cannot be viewed as making the transition to the system of accounts based on FOB-site prices more difficult. This journal (No 8 for 1978) published a detailed story on the forms and methods of the transition to the system of FOB-site prices in the Latvian SSR, Estonian SSR, and Moldavian SSR where construction is carried on by a large number of contracting organizations belonging to different ministries and departments and local materials and articles are manufactured at enterprises subordinate to many different ministries. As for ideas of the necessity of forming new marketing organizations, this issue was also reviewed carefully above. If we bring up particular oblasts, the 1978-1979 plan for the transition to the system of FOB-site prices envisioned which organizations in these oblasts could be assigned the functions of supplying local materials and articles at FOB-site prices.

In Kaluzhskaya Oblast, for example, the UPTK [Production Equipment Supply Administration] of the Kaluga Construction Administration of the USSR Ministry of Industrial Construction can perform the functions of supplier organizations for reinforced concrete articles, as can the UPTK of the Kalugasel'stroy [Kaluga Rural Construction] Trust. In Kurskaya Oblast these functions can be assigned to the Kurskstroykomplekt [Kursk Construction Equipment] Trust of the Kursktyazhstroy [Kursk Heavy Industry Construction] Association and the UPTK of the Kursksel'stroy [Kursk Rural Construction] Administration. In Ul'yanovskaya Oblast the functions can be performed by the Ul'yanovskstroykomplekt [Ul'yanovsk Construction Equipment] Trust of Glavul'yanovskstroy [Main Administration of Construction in Ul'yanovsk] of the USSR Ministry of Construction and the UPTK of the Ul'yanovksel'stroy [Ul'yanovsk Rural Construction] Trust. The functions of supplier of local building materials in these oblasts may be assigned to oblast associations of the RSFSR Ministry of Building Materials.

From the Editors

On this subject A. L. Zapol'skiy correctly remarks that it is not so much objective factors that are obstructing introduction of the system of FOB-site prices as it is inadequate knowledge of the mechanism and methods of switching to accounts based on these prices. This can only be regretted, because methodological documents and practice provide rich material for an understanding of the problem if one becomes thoroughly familiar with them and takes the activist position of disseminating progressive know-how, which insures a greater influence of the price and charges mechanism in raising production efficiency.

A. K. Yakovlev and M. G. Novak favor confining the introduction of accounts based on FOB-site prices to the general revision of estimate norms and prices planned for the 11th Five-Year Plan. Several participants in the discussion such as A. L. Zapol'skiy and I. P. Kizel' hold a different point of view which says that it is unwise to postpone the transition to charges for deliveries at FOB-site prices in oblasts and republics where preparatory work has been done and the necessary production and economic conditions are in existence. Introduction of this system in 1980-82 will permit comprehensive development of the mechanism and methods of settling accounts and creating necessary prerequisites for a planned transition to single-level oblast estimate prices during the general revision of estimate norms and prices.

As G. M. Khaykin remarks, there is no real need to object to the statement that it is advisable to introduce FOB-site prices for charges for deliveries of materials concurrently with the general revision of estimate norms and prices. In fact, only a simultaneous introduction of estimate prices for materials and calculated FOB-site prices will insure full correspondence of the cost of contracting organizations for transportation of materials to the capital allocated for this purpose in the construction estimates. Under these conditions the system operates most efficiently.

At the same time it should be kept in mind that it is possible in principle to switch to accounts based on FOB-site prices without revising estimate prices ratified earlier. This has been proven by scientific methods and confirmed by the experience of various regions. This alternative for the transition to account by FOB-site prices insures stabilization of the transport cost of contracting organizations and is particularly timely today. It fully meets the requirements, contained in the 12 July 1979 decree of the CPSU Central Committee and USSR Council of Ministers, for further development of economic accountability and insuring that all planned expenditures are fully self-repaying. Implementing this alternative will promote a substantial reduction in work to determine transportation schemes and for keeping transportation records and new estimate prices.

From the Editors

A number of the responses to the questions raised by the editors of the journal *EKONOMIKA STROITEL'STVA* contain statements reflecting the positions of the authors on certain fundamental issues of the employment of the system of FOB-site prices. Although a consideration of them goes beyond the framework of the questions posed by the editors, it seems useful to present them briefly.

A. V. Volosatov (Estimate-Contract Administration of the USSR Ministry of Construction) feels that accounts based on FOB-site prices should be viewed not so much as a means of fundamentally reordering the estimate system and price formation in construction as an essential prerequisite for the introduction of centralized, complete deliveries of local materials and reinforced concrete articles.

In the opinion of G. M. Khaykin, this formulation of the issue, which artificially juxtaposes the problems of improving price formation in construction to the problems of straightening out its organization and material-technical support, does not follow from practical experience with the use of FOB-site prices. In Latvia and Estonia the transition to accounts for deliveries of local materials and articles at FOB-site prices in 1969 permitted a fundamental reordering of the system of estimate norms. In the republic uniform republic-wide estimate prices were developed in place of the estimate prices that existed for 16 different zones in Latvia and 3 zones in Estonia. This made it possible to coordinate uniform price lists for building, structure, and other norms on a single basis.

It should be emphasized specially that the transition to using uniform republic-wide estimate prices created conditions for normal economically accountable activity by contracting organizations on the basis of stabilization of transportation costs; the estimate prices established on the zone principle did not do this.

Considering that existing estimate prices for local materials and articles are set for numerous small zones (more than 1,200 in most oblasts and republics, it is not hard to imagine how important the transition to accounts based on FOB-site prices would be for improving the regionalization of the overall system of estimate norms on a national scale (estimate prices, standard price lists, consolidated estimate norms, price lists for buildings and structures).

At the same time, as E. P. Polkovnikova, M. F. Memetov, A. I. D'yachkov, and others correctly observe in their articles in *EKONOMIKA STROITEL'STVA* (1977 No 8), introduction of the system of FOB-site prices was an effective way to improve material-technical supply to construction and expand the volume of full deliveries.

A. K. Yakovlev asserts that the transition to accounts based on FOB-site prices only partially solve the problem of stabilizing the costs of contracting organizations in purchasing construction materials and components because this system encompasses only local building materials and reinforced concrete articles.

Objecting to this, G. M. Khaykin observes that A. K. Yakovlev's statement does not take account of significant differences in the structure of estimate prices for local and imported materials. The stabilization of transport costs for local building materials which is achieved with the transition to accounts based on FOB-site prices solves this problem for the most part because the share of transport expenditures in estimate prices for imported materials is relatively small and, in addition, for many of them FOB-destination stations wholesale prices have been established. Therefore, differences in the level of transport expenditures at contracting organizations for the assortment of imported materials are immeasurably smaller than differences for local materials and articles.

Without denying the progressive quality of the system of FOB-site prices in principle, L. M. Rozov (estimate-contract administration of the USSR Ministry of Rural Construction) expresses his concern that under conditions of rural construction where deliveries at FOB-site prices are charged to the UPTK of the construction and installation trust, there are no basic differences with the existing system of accounts based on calculated plan prices. Moreover, in the opinion of L. M. Rozov, calculated plan prices are more flexible because they, unlike FOB-site prices, are worked out for each construction organization, are constantly reviewed, and take into account the concrete conditions of delivery of materials to the construction site.

G. M. Khaykin does not agree with L. M. Rozov on this matter. In his opinion this is obviously an incorrect statement of the question because it is common knowledge that calculated plan prices appeared and are used in construction as a means of insuring economic accountability within the trust. It is this function of such prices that determines the procedure for taking them into account in the elements of expenditures and entails periodic revisions (usually annually).

In those regions where the transition to accounts based on FOB-site prices has been made, there is no longer any need to compile and constantly revise calculated plan prices at construction and installation trusts: calculated plan prices developed on the basis of FOB-site prices differing from them only by the amount of warehouse expenditures and staying constant through the entire period of effectiveness of the FOB-site prices. The use of FOB-site prices promotes a situation where the costs of all contracting organizations in the

oblast for transportation of the corresponding types of local materials are formed on a single basis, reflecting socially necessary conditions of production of the materials and their delivery to consumers.

Moreover, it is widely known that the wholesale prices of industry and estimated prices for materials do not reflect the actual conditions of production of output at a particular enterprise, nor the concrete conditions of delivery of the materials to a definite construction site; they are average sectorial (or regional, or zonal) conditions of production and sale of output.

By analogy with this, contracting organizations should pay the cost of materials and articles consumed in conformity with invoices (delivery schedules) of marketing organizations at prices which take into account the average transportation expenditures adopted in estimates for construction, not for the concrete conditions of delivery to the particular construction site. This is the sense of accounts based on FOB-site prices.

Unlike the situation with calculated plan prices, the use of FOB-site prices promotes a situation where costs of transporting materials within the oblast (republic) form at a stable level. This becomes especially important with the transition in construction planning to the use of stable economic norms.

In those oblasts and republics where construction is carried on by two or more contracting trusts, the use of FOB-site prices for accounts for the delivery of materials assumes a qualitatively new aspect in the formation of construction costs owing to transportation factors (compared with the use of calculated plan prices) because these prices are composed on a uniform level for all construction organizations. In this case too, however, when construction in the oblast is carried on by one contracting trust and its UPTK assumes the functions of supplier of reinforced prefabricated concrete at FOB-site prices, the advantages of using these prices as compared to calculated plan prices are obvious. This provides stability of transport expenditures in mobile mechanized columns and construction-installation trusts and a consistent correspondence with the capital allocated for this purpose as envisioned in construction estimates. Considering the high rate of growth in the volume of construction in rural areas and constant changes in the conditions and distances of delivery of local materials and articles introduction of the progressive system of accounts based on FOB-site prices offers, in addition to the advantages noted above, a major reserve for identifying and evaluating the scope of these changes, the degree of their impact on the economic indexes of contracting organizations, and the need to take necessary steps to increase the profitability of rural construction.

From the Editors

Many years of experience with accounts at FOB-site prices in various regions of the country indicate that the system of FOB-site prices is most suitable for organizational economic accountability. Transferred to construction practice it has proven its unquestionable efficiency.

For example, during the discussion by correspondence concern was expressed that lack of departmental coordination among the enterprises that manufacture reinforced concrete and local materials hampers the introduction of the system of FOB-site prices. Of course, the production of these materials in the oblast (or republic) unrestricted by departmental framework, creates more favorable conditions for the transition to deliveries at uniform prices. However, it should be kept in mind that eliminating departmental lack of coordination in the production of a single type of output in an oblast, kray, or republic is an independent and quite complex task. At the same time science has substantiated and practice has confirmed that centralization of the marketing of products at uniform prices is also possible in conditions where the production is scattered over various ministries and departments. Eliminating departmental lack of coordination in production is not a goal-in-itself, but rather a means to better satisfy production and nonproduction needs.

In this sense the transition to centralization of the marketing and delivery of local materials and articles at uniform prices and its ultimate form, the delivery of technologically complete sets of articles at FOB-site prices, are by themselves a major advance in satisfying the needs of construction organizations for material resources.

Therefore, thoughtful preparatory work in the oblasts, krays, and republics, above all carefully organized economic study by the managers and specialists at planning, construction, and marketing organizations and enterprises and banking institutions, is an important stage in the transition to the system of FOB-site prices.

The activation of work in local areas should promote the spread of the progressive know-how of those regions where the system of FOB-site prices is in use and leads to creation of the necessary conditions for its introduction in all oblasts, krays, and republics in the 11th Five-Year Plan.

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CONSTRUCTION

IMPROVEMENT IN ADMINISTRATIVE APPARATUS OF CONSTRUCTION INDUSTRY

Moscow PRAVDA in Russian 4 Feb 80 p 2

[Article by A. Yakovlev, chief of the Main Planning and Economics Administration of the USSR Ministry of Construction and candidate of economic sciences: "Construction Associations"]

[Text] Today many people's attention has been drawn to the problems of capital construction. This is no accident. The unsatisfactory state of affairs in this sector is holding back the further development of the national economy. There are many reasons for this, but the strategies for solving most of them have been defined in the decree of the CPSU Central Committee and USSR Council of Ministers on improvement of the economic mechanism. Everyone, of course, understands quite well that planning, economic and party authorities have a great deal of organizational work to do to carry out the decree.

I intend to set forth my judgments concerning one of the most important problems of construction--establishing a more orderly structure for its management. Moreover, I will not be speaking about the top level, but about the middle and lower levels, about that level which is closest to production. Analysis shows that the number of lower-level construction subdivisions is growing, while the amount of work they do is at best remaining at the level of 5 years back. Why is this the case?

In answering this question we analyze the evolution of the primary level of management and those adverse aspects which have begun to have a bad effect on production. For more than a decade have had trusts and equivalent subdivisions. But they have undergone great changes in that time. You can well imagine that a former trust with an annual volume of work amounting to 25 million rubles differed from a present trust in being self-enclosed and independent in solving many problems. In addition to general construction organizations, it also had jurisdiction over specialized organizations. It had on its balance sheet plants making bricks, reinforced concrete and concrete, quarries and machine shops, sawmills and woodworking

capacities, and a variety of equipment and vehicles. Even a quarter of a century ago a trust like this had 10,000-12,000 workers and employees. This gave it great independence. It could with its own resources build practically any project at the technical level of that time without help from outside. And in the ministry the directors of the trust solved a number of long-range problems. But the shortcomings of the trusts are the low level of technology and accordingly of labor productivity, the high production cost--sometimes its good attributes were nullified. For that reason annual output did not exceed 5,000 rubles per man. Remuneration was also imperfect.

Yet the rapid pace of economic development and the fast rise in the technical level of projects to be built made it imperative to speed up industrialization, to increase the amount of prefabrication and to make the specialization of the construction industry more elaborate. As time went by as much as 80 percent of the work on the construction site began to be done by specialized subdivisions, which resulted in a sharp increase in the number of external and internal subcontractors. For example, about 35 such subdivisions not subordinate to the general contractor were involved in building the complexes of the Dorogobuzh Nitrogen Fertilizer Plant.

But what has happened to the trust? It has come to have many constructive features. It is now enough to have 2,000 or 2,500 people to perform the same amount of construction and installation work. The annual output per man has risen to between 8,000 and 12,000 rubles. Quality has improved, and the pace of operation has quickened. But it has also lost quite a bit. In particular, it has lost its independence in solving many important problems. Materials and fabrications are obtained from outside, and that also applies to machines and vehicles. At present about 60 percent of its work is done by external subcontracting subdivisions.

Under those conditions the trust is compelled to turn to main administrations and the ministry to solve the problems that arise in material and technical supply and employment of equipment, vehicles and subcontractors. And instead of working on the long-range problems of managing the construction industry, they are compelled to concern themselves with current operations.

Only one conclusion can be drawn from what we have said: The present structure of administration of capital construction has lagged behind the development of technical progress and to a considerable extent is a brake upon it. There was a time when the industrial sector suffered from this disease, but there an effective cure was found: production and scientific-production associations were created with a relatively self-enclosed economic cycle. Many years of experience of such giants as AvtoZIL, AvtoVAZ and others convincingly demonstrated the effectiveness of this management structure. Today, then, one can boldly state that the correct way to improve management of the national economy is to establish an association not only of enterprises in a single industry, but also of related enterprises

participating in the manufacture of the final product and to establish long-term direct relations among them.

This inevitably gives rise to the question: And can such associations be created in the construction industry? Of course, it does have its specific nature and it would be wrong to merely transfer the structure that has been established in the industrial sector. But we also have acquired a certain experience. The Vinnitsa method of a management structure without trusts is well known, for example. A year ago Kaliningrad builders adopted that form. But this frightens many executives in the economy. Is it after all possible to do without the trusts, which have existed for decades?

But what, for instance, does the Kaliningrad Production Association represent? It alone is able to carry out a work program amounting to 50-60 million rubles per year. It includes industrial enterprises, the motor pool and construction equipment, housing management and utilities. In other words, it is an association that in its structure is similar to the trust of the thirties and forties.

This is what one might call a regional organization. But after all even specialized structures could be regional. For example, the Yaroslavl' builders have recommended that an association be created for housing and public works construction with a volume of work amounting to 50-55 million rubles per year from two housing construction combines and the trust Yargorzhlstroy. There are associations for large-panel housing construction in Uzbekistan and Turkmenia.

Unfortunately, no one is summarizing the experience that exists. Our science still has not furnished the necessary recommendations, and USSR Gosstroy has so far limited itself only to issuing instructions on the procedure for working out general management schemes and the regulation on the construction-and-installation association. These documents have dealt with the basic and fundamental questions of improving the structure of all levels of management of the construction industry. Yet as an experiment one might merge, say, all the trusts building chemical projects into a national association Khimstroy. Especially since the complexity of building projects in this industry requires that one have competent personnel, permanent direct relations with the client's staff services and with enterprises manufacturing the production equipment, and also with subcontracting organizations. All this could be achieved within the context of a specialized association whose work program--within, say, the USSR Ministry of Construction, would amount to 500 million rubles. This would undoubtedly improve technology, it would speed up project construction, and it would boost the economic and quality indicators.

Obviously, it would also be advisable to set up such associations to build the projects of ferrous and nonferrous metallurgy, related machinebuilding enterprises, and agriculture. Project planning organizations would be part of them. But an experiment is necessary for a final conclusion. But when matters come to this point, everyone takes his hands off.

Here is why. Every time we must present a request to establish benefits to the USSR Ministry of Finance. This is altogether proper, since its responsibility is to oversee economical expenditure of the funds of the state. For that reason one cannot object to this procedure. But by no means can we agree to the practice that has become established there and which has now been made into a kind of aphorism by the financial people: "Refuse--don't make a mistake." And they do refuse, not reflecting even for a minute about the fact that the production people turning to financial authorities are also guided by the interests of the state and are not conducting experiments for the sake of experiments, but in order to find ways of raising production efficiency which will ultimately have a favorable impact on the state budget.

I would like to discuss one other problem whose solution is crucial to the activity not only of the future associations, but also of regional management agencies that now exist. As we mentioned above, industrial enterprises, transport organizations and staff services for mechanization have been withdrawn from the trust at the present time. Subcontractors are now external entities. For that reason the management of the trust has gradually begun to concern itself with those same matters as the management of the lower-level subdivisions--the organization of work and production and coordination of the work of subcontractors. The result is that many trusts have centralized the functions of their administrations for production planning, for finance, for personnel affairs and for other matters. In practice they have become the primary level of management, having left to the construction and installation administration only production functions, the rights of a shop in an industrial enterprise. As we see, the lower-level subdivisions are dying out as an independent level of management. This tendency promises a large gain.

But still another important problem is arising in this constructive process: the increased size of organizations. Every rayon or city unfailingly wants to have its own construction organization regardless of the amount of work. Our ministry last year issued an order requiring that regional main administrations and republic ministries submit their proposals on improving the structure of management, clearing them with local party and Soviet authorities. The materials that came in contained almost no proposals for increasing the size of construction organizations operating as contractors. A majority of the regional subdivisions, on the insistence of local authorities, intermediate concerning the creation of new trusts, administrations and mobilized construction machinery teams. The result is a paradox: the ministry argues that small organizations are unprofitable, that they cause a large amount of losses, while not uncommonly local party and Soviet authorities seek ways of growth which do not involve increasing the capacity of the existing subdivisions, but of creating more and more new construction organizations. Improving the structure of management of capital construction is an important task of state importance. But this matter is still not receiving enough concern on the part of USSR Gosstroy, construction ministries and local party and Soviet authorities. Greater

vigor is needed in solving the problem in the light of the decree of the CPSU Central Committee and USSR Council of Ministers on improvement of the economic mechanism. In our opinion, USSR Gosstroy should be principally called upon to be the pioneer. Along with the ministries it is responsible for defining the general line and answering the question of what the primary level of management should be.

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CONSTRUCTION

PLANNING, FINANCING INTRODUCTION OF CONSTRUCTION INNOVATIONS VIEWED

Moscow STROITEL'NAYA GAZETA in Russian 15 Feb 80 p 2

[Article by V. Kiyevskiy, candidate of economic sciences, in a series edited by A. Mitrofanov, professor and doctor of economic sciences: "Incentives for Progress"]

[Text] Intensification of the economic motivation of construction organizations to make more extensive use of technical innovations, which is called for by the decree of the CPSU Central Committee and USSR Council of Ministers on improvement of the economic mechanism, will be furthered above all by the new and more progressive system of indicators of 5-year and annual plans, which is oriented toward attainment of the end results.

Now the general economic indicators of the plan will motivate construction organizations to a considerably greater degree to apply progressive technical solutions aimed at reduction of materials intensiveness and labor intensiveness of the construction process. The transition during the 11th Five-Year Plan to the planning of labor productivity on the basis of normative net output will not only reflect more fully each collective's contribution to raising the efficiency of social production, but will also eliminate to a considerable degree the interest which construction organizations have had in using expensive fabrications and materials.

Financial and economic instruments occupy an important place in the system of economic measures to motivate scientific-technical progress. The decree called for the formation of unified funds for development of science and technology in industries and departments. They are intended for the financing of scientific research, experimental design, and process engineering projects and for reimbursement of costs incurred in creating and putting into production new products and manufacturing processes and in the introduction of scientific management. Additional outlays to improve product quality and to cover higher costs in the first years of production of a new product are also to be financed from this source. The unified fund for development of science and technology will be formed from deductions from the planned profit of construction and installation organizations (production associations) at rates set in the 5-year plan (in a breakdown by

years). In our opinion it would be best if these rates are as a rule defined in percentages of normative net output.

We should emphasize that the cost of projects related to organizing the production of new technology and applying it in practice, if they are financed from the unified fund for development of science and technology, is included in the total volume of output (work performed).

In the construction industry a certain experience has been acquired in the formation and use of unified funds for development and technology: for example, in the Belorussian Ministry of Construction and certain other organizations. This experience indicates the effectiveness of this instrument for promoting scientific-technical progress.

Production development funds formed within construction organizations themselves are another source of financing. They are not being fully utilized at the present (only 30-40 percent of the amounts credited are being used in certain construction organizations). The decree of the CPSU Central Committee and USSR Council of Ministers defines the measures necessary to correct this defect.

The scope of credit financing of measures to create and apply new technology is being expanded considerably. For the construction industry this has essential importance, since at present this credit financing is sporadic. The decree calls for development of the credit financing of highly effective measures to develop science and technology not envisaged by the plan. Power has been granted to repay credit in 2 years from the unified fund for development of science and technology. The credit can be granted to enterprises to pay for projects financed from the unified fund for development of science and technology when these projects are completed ahead of schedule, and to ministries and departments in cases when during the year the flow of funds into the unified fund for development of science and technology does not coincide with the size of expenditures being made from it.

The dynamic nature of scientific-technical development of construction and installation organizations not uncommonly makes it necessary to carry out certain measures which could not have been foreseen when the annual plan was compiled. In such cases it is allowed to make the relevant expenditures over and above the limit on state capital investments from unused funds in the production development fund and from above-plan transfers to that fund.

The awarding of bonuses to personnel for creation and application of new technology has essential significance within the set of measures related to the economic motivation of scientific-technical progress. There is a need for definite correction of the ratio that has come about in the construction industry between bonus funds intended for that purpose and those awarded for current production performance. The point is that the share of bonuses for new technology represents only about 3 percent of the total

amount of bonuses at the present time. The incentive procedure based on the total economic benefit actually obtained in the economy from use of the achievements of science and technology will help to correct this error. To that end there is a need to introduce in the construction industry a system for reckoning the actual benefit from application of new technology, along with the relevant statistical reporting system. The methodological basis for organizing this kind of recordkeeping is contained in the Instruction on Determination of the Economic Benefit of the Use of New Technology, Inventions and Production Innovations in the Construction Industry (Construction Norm 509-78).

An analysis of the planning, financing and economic motivation of scientific-technical progress, summarization of the results of particular experiments in this field, and also a study of the experience of a number of industries indicate that a radical solution to the problem can be achieved only if ministries and departments develop and introduce on cost-accounting principles comprehensive sectorwide systems for organizing the work of creating, producing and applying new technology.

The decree calls for scientific research, design, production engineering and other organizations as well as associations (enterprises) of industrial ministries to complete the transition to this kind of system during 1980.

The basic principles of these systems envisage the following:

- i. continuous planning and financing of work in the "science--project planning--construction work" cycle and ruble control over fulfillment of the plans of scientific research, project planning, design and production engineering projects using job orders;
- ii. assurance of general economic motivation of all participants in the creation, production and application of new technology toward the end results achieved in the construction process and also in the operation of completed projects;
- iii. use of the actual economic benefit from application of scientific-technical developments as the source for financing and building economic incentive funds, retaining budget financing for those scientific research projects which are most important to the sector or industry.

BUILDING MATERIALS

WHOLESALE PRICES, UNIT OUTPUT FOR CONCRETE PRODUCTS DISCUSSED

Moscow BETON I ZHELEZOBETON in Russian No 1, Jan 80 pp 2-4

[Article by F. T. Potapenko, Candidate of Economic Sciences and Director of the Economic Planning Administration in the Main Moscow Construction Materials Industry and V. A. Kovalenko, Candidate of Economic Sciences and Assistant Director of the KTB [Technical Design Bureau] in the Moscow Construction Materials Organization: "Improving Wholesale Prices and Net Production Standards for Concrete and Reinforced Concrete Articles"]

[Text] A transition to a net production indicator is being accomplished by training in this corresponding field.

From the CPSU Central Committee and USSR Council of Ministers Decree "On Improving Planning and Strengthening the Influence of the Economic Mechanism on Increasing Production Efficiency and Work Quality."

In the CPSU Central Committee and USSR Council of Ministers Decree "On Improving Planning and Strengthening the Influence of the Economic Mechanism on Increasing Production Efficiency and Work Quality." A complex system of measures is defined that will provide dynamic growth for our economy and a steady improvement in the well being of the Soviet people.

Planning improvements are of paramount importance in these measures. In accordance with the decree a new system of planning indicator is being introduced on all management levels. The work done by ministries, central boards, combines and enterprises will be evaluated not in "lump sums" but according to individual contributions made by collectives toward the growth of the net production standards. This will give new stimulus to increase the efficiency and quality of work.

Dozens of economic experiments were conducted on a large scale beforehand in industry, construction and transportation. The Main Moscow Construction Materials Industry even took part in one of these experiments--to gauge the amount of work done by planning mechanisms according to net production standards.

Net production standards were put into practice for the work done at main administration enterprises almost 4 years ago; since 1 January 1976 the precast reinforced concrete industry transferred to this indicator in the experimental system--24 enterprises with 20,000 workers. After 2 years of the experiment--since 1 January 1978--net production standards were continually used for planning and evaluating the activities of all 77 combines and enterprises in agreement with the USSR Gosplan.

The experience gained from the work done by main administration enterprises testifies to the fact that net production standards aid in increasing production efficiency, in improving the implementation of products list plans and engineering work involved with providing necessary articles, in reducing material consumption and in accelerating the rate of technological progress. In 4 years the use of net production standards for labor productivity in the precast reinforced concrete industry grew by 12.3 percent as against 11.2 percent in the plan. The labor of 1,900 workers was economized. The output of precast reinforced concrete for one worker reached 345 cubic meters as opposed to the industry average of 217.

Enterprises which are using the new indicators have a greater rate of increase in the volume of production. On the whole, according to the central directorate, production grew by 22 percent as against 18.3 percent in the plan. Improving implementation of products list plans made it possible to reduce the length of time needed to provide necessary articles for completely prefabricated housing units by 15 to 20 percent. The time needed to put new articles into production was cut in half. Before transferring to the new indicator the average number of new articles that were put into production was 350; after the transition it was 700.

In 3 years material consumption was reduced by approximately 2 percent, which made it possible to economize on 64,000 tons of cement, 9,000 tons of metal, 12,300 tons of conventional fuels and 15.8 million kilowatts of electricity, with the total sum equaling 5 million rubles.

In addition to this an analysis of the work done by enterprises that have transferred to net production standards testifies to the fact that the possibilities contained in the new indicator for improving production efficiency are still not being utilized as much as possible.

When introducing net production standard indicator it is necessary to keep in mind that of the 3 cost indicator fixed by decree, 2--volume of production and labor productivity growth--are calculated on the basis of net production standards, and the third--profits--still depends on the price levels in effect. Under the principles which have been formed up to the present day the formulation of price levels, as before, is closely linked to material consumption in production. Therefore, in the initial stage the use of the net production standard indicator did not completely include the influence of the material consumption factor on the composite evaluation of the results of the work done by enterprises.

The net production standards have acquired an individual character. The standards that were established were not identical for the very same type of article which was turned out by different enterprises. One of the serious deficiencies of such an approach is the unaccountable difference in the volume of net production standards when transferring production of an article from one enterprise to another.

With the aim of increasing the interest of production combines and enterprises to improve the use of production funds and to economize on raw materials for the manufacturing sector the CPSU Central Committee and USSR Council of Ministers Decree specifies that profitability is to be determined by the relationship of profits to cost according to the method of production by means of deducting the cost of raw materials, fuel, energy, materials, and semi-finished products which were used and articles which were provided. It has been established that when new wholesale prices are introduced the net production standards are simultaneously determined for the corresponding article originating with progressive labor consumption norms. This decision creates a unified basis for forming a system of economic indices including prices.

The Main Moscow Construction Materials Industry, in agreement with the USSR State Pricing Committee, has made an attempt to create prices and net production standards which would meet the above needs.

In accordance with the method developed by the KTB in the Moscow Construction Materials Organization in collaboration with the Scientific Research Institute on Pricing, wholesale prices and net production standards for manufacturing reinforced concrete articles are to be worked out on a unified basis and entered into the so-called experimental price lists. Price list No 06-08 (part III) for reinforced concrete articles was approved by the USSR State Pricing Committee on 16 April 1979 and price list No 06-14-01 (part I) for concrete, mortar, concrete components and other articles was approved 18 April 1979. They are in effect from 1 January 1980 to 1 January 1982 at Moscow municipal ispolkom enterprises.

Developers of the system were faced with the task of creating price lists that would increase the interest of enterprises for producing articles with reduced material consumption and of creating equally advantageous conditions for turning out all structures and articles that are included in the planning product list; that would maintain the average net production standards for each sector; that would link wholesale prices and net production standards; that would eliminate unprofitableness or high levels of profits for certain groups of articles.

In order to increase the economic interest of enterprises it was decided to fix profit standards to the sum of wages of industrial-production personnel and amortization charges.

The regional profit standards (in percent) are determined by the formula:

$$H_{np} = \frac{\Pi_p}{\Phi_{z.p.} + \Phi_a},$$

where Π_p is the total amount of regional profits in thousands of rubles for a group of plants for whose production the new price list applies; $\Phi_{z.p.}$ is the annual fund for the wages of industrial-production personnel in this group of plants in thousands of rubles; Φ_a is the annual amortization charges of industrial-production funds for the same group of plants in thousands of rubles.

Including amortization charges as a part of the basis for determining profit standards ensures that enterprises will have an interest in mechanizing and automating production and in reducing manual labor expenses for manufactured products.

Planned profit standards, calculated on the basis above, were fixed at 45 percent of the sum of wages of industrial personnel and amortization charges.

Planned profits (in rubles) in wholesale prices for the basic portion of each type of production is determined by the following formula:

$$\Pi_a = \frac{H_{np} \times (3_a + A)}{100},$$

where A is the amortization charges for a single article in rubles; 3_a is the wages of industrial-production personnel for a single article in rubles determined by the formula:

$$3_a = 3_0 + 3_k,$$

where 3_0 is the wages of production workers directly related to the item for calculating a single article in rubles; 3_k is the wages of industrial-production personnel represented in the item by composite expenditures in the calculations for the cost of a single article in rubles;

$$3_k = K \times 3_0; K = \frac{\Phi_{z.p.k.}}{\Phi_{z.p.} - \Phi_{z.p.k.}}$$

where $\Phi_{z.p.k.}$ is the funds for wages based on estimates of indirect expenditure items (repair and use of equipment for shops and for the plant overall) in thousands of rubles; K is the coefficient characterizing the relationship of wages, based on estimates of indirect expenses, to the funds for production workers' wages for the enterprise as a whole.

The magnitude of profits in the value of each increase to improve the consumer features of an article is determined in an analogous manner. The basis for calculating these profits is the average expenses of a group of enterprises after including non-production expenditures or the standard calculation for supplementary expenses related to improving the features of an article.

Net production standards were fixed for experimental price lists while working out wholesale prices. Net production standards were established for each wholesale price, increase and reduction, which are obligatory and identical for all Moscow municipal ispolkom enterprises that turn out concrete and reinforced concrete articles.

Calculating the average net production standards for the sector is done in the following manner.

The relationship of the volume of net production (minus profits) to the wages for the principal production workers of a group of plants for whose production the new price list applies:

$$K_{\text{н.ч.н.с.}} = \frac{3_{\text{н}} + B + P}{3_0}$$

where $3_{\text{н}}$ is the wages of industrial-production personnel for a group of plants in thousands of rubles; B is the deductions for social insurance for these plants in thousands of rubles; P is the portion of similar expenses which are included in the total net production; 3_0 is the wages in thousands of rubles of the principal production workers for these very same plants.

Then the net production standards for each item were fixed in the cost structure, i.e., minus profits (НЧП_c):

$$\text{НЧП}_c = 3_0 \times K_{\text{н.ч.н.с.}}$$

The absolute net production standards were calculated by article:

$$\text{НЧП}_{\text{абс}} = \text{НЧП}_c + \Pi_{\text{н}}$$

where $\Pi_{\text{н}}$ is the planned profits for a given article (it is included at the same rate in both the wholesale prices and net production standards for each article).

Net production standards for articles whose wholesale prices have remained unprofitable are determined by:

$$\text{НЧП}_{\text{абс}} \leq \text{НЧП}_c \leq \text{Ц}_0,$$

where Ц_0 is the wholesale price of the article.

An example is given below of calculations of wholesale prices and net production standards for the walls of the BSTs [expansion unknown] building and the slabs used to surface highway PDA [expansion unknown] 6-1.75 including increase and reductions specified by the price list.

Calculations of the Cost of 1 M³ of an Item in Rubles

	Walls for BSTs Quarters	Slabs used to surface Highway PDP 6-1.75
Materials and raw materials	33.02	36.05
Fuel for technological needs	0.36	1.52
Basic wages of production workers	6.63	2.08
Supplementary wages of production workers	0.53	0.16
Deductions for social insurance	0.44	0.15
Expenses for maintaining and utilizing equipment	6.67	6.43
Shop expenditures	2.60	1.64
Overall plant expenditures	5.36	2.46
Other production expenditures	1.35	0.37
Production costs	59.96	50.80
Non-production costs	1.02	0.47
Total cost	57.98	51.27
Including amortization deductions	7.89	4.70
Coefficient characterizing the relationship of wages, which are related to indirect cost items, to wages of production workers	0.90	1.10

For example, the profits and wholesale price for 1 cubic meter of an item according to the methodology now in use:

A wall at the BSTs building

$$\Pi_{\pi} = \frac{57.98 \times 12\%}{100} = R6.96$$

$$L_o = 57.98 + 6.96 = R64.94$$

A slab used to surface highway PDP6-1.75

$$\Pi_{\pi} = \frac{51.27 \times 12\%}{100} = R6.15$$

$$L_o = 51.27 + 6.15 = R57.42$$

The profits and wholesale price for 1 cubic meter of an item according to the experimental methodology:

A wall at the BTS building

$$\Pi_n = \frac{45 \times [6,63 + 0,53 + 0,9]}{100} \times \frac{\times (6,63 + 0,53) + 7,89}{100} = 9,67 \text{ p.}$$

$$\Pi_o = 57,98 + 9,67 = 67,65 \text{ p.}$$

A slab used to surface highway PDP6-1.75

$$\Pi_n = \frac{45 \times [2,08 + 0,16 + 1,1]}{100} \times \frac{\times (2,08 + 0,16) + 4,71}{100} = 4,23 \text{ p.}$$

$$\Pi_o = 51,27 + 4,23 = 55,5 \text{ p.}$$

The average net production standards for the sector for 1 cubic meter of wall at the BSTs building comprise $7.16 \times 1.9 + 9.67 = R23.27$; for a slab used to surface highway PDP6-1.75-- $2.24 \times 2.1 + 4.23 = R8.93$.

It follows from the examples given that the new pricing methodology increases the economic interest of enterprises to produce and put articles into production which have low material consumption. For the slabs used to surface highway PDA6-1.75, the material consumption for which exceeded 73 percent of the cost of the item, the level of profits in the cost is reduced by 31 percent and for walls in a building which have a material consumption of 57.5 percent it increases by more than 47 percent.

The initial indicators used to determine new wholesale prices and net production standards--the cost, wages and amortization deductions--were taken from the data for 1976 for concrete and reinforced concrete articles that were turned out by 49 enterprises under all the central boards of the Moscow municipal ispolkom including the Main Moscow Construction Materials Industry, the Main Moscow Construction Directorate, the Main Moscow Assembly and Special Construction Directorate, the Main Moscow Construction Engineering Directorate, and the Main Moscow Industrial Construction Directorate.

In accordance with the terms set by the USSR State Pricing Committee the level of profitability for the production of reinforced concrete articles in 1976, which comprised 9.2 percent of the cost for the Moscow municipal ispolkom as a whole, was not changed in the new price list. The correlation between prices, however, was balanced and was put on an economic basis. Of the 49 Moscow municipal ispolkom enterprises using the new price lists the number of those that were unprofitable due to planning was reduced from 3 to 1.

After putting the experimental price lists into use it is stipulated that the results of using the new prices and net production standards are to be carefully analyzed and the materials which are obtained are to be used to re-examine wholesale prices for concrete and reinforced concrete items.

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USSR REPORT: Economic Affairs
USSR REPORT: Construction and Equipment
USSR REPORT: Military Affairs
USSR REPORT: Political and Sociological Affairs
USSR REPORT: Energy
USSR REPORT: International Economic Relations
USSR REPORT: Consumer Goods and Domestic Trade
USSR REPORT: Human Resources
USSR REPORT: Transportation
USSR REPORT: Translations from KOMMUNIST*
USSR REPORT: PROBLEMS OF THE FAR EAST*
USSR REPORT: SOCIOLOGICAL STUDIES*
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USSR REPORT: Life Sciences: Biomedical and Behavioral Sciences
USSR REPORT: Life Sciences: Effects of Nonionizing Electromagnetic Radiation
USSR REPORT: Life Sciences: Agrotechnology and Food Resources
USSR REPORT: Chemistry
USSR REPORT: Cybernetics, Computers and Automation Technology
USSR REPORT: Electronics and Electrical Engineering
USSR REPORT: Engineering and Equipment
USSR REPORT: Earth Sciences
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USSR REPORT: Materials Science and Metallurgy
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